

LAY VOLUNTEER AND PROFESSIONAL TRAINEE
THERAPEUTIC FUNCTIONING AND OUTCOMES IN A
SUICIDE AND CRISIS INTERVENTION SERVICE

By

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To my wife, Betty

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TABLE OF CONTENTS

	PAGE
ACKNOWLEDGEMENTS.....	iv
LIST OF TABLES.....	ix
ABSTRACT.....	xi
CHAPTER	
I. INTRODUCTION.....	1
<u>The problem.</u> -.....	6
II. REVIEW OF THE LITERATURE.....	8
<u>Crisis Theory.</u>	8
<u>Nonprofessional Telephone Therapists in.....</u>	15
<u>Suicide Prevention and Crisis</u>	
<u>Intervention Centers</u>	
<u>Facilitative Conditions.</u>	19
<u>Crisis Center Outcomes.</u>	25
III. METHOD.....	34
<u>Subjects.</u> -.....	34
<u>Age and sex of sample.</u> -.....	34
<u>Suicide and Crisis Intervention....</u>	35
<u>Service of Gainesville,</u>	
<u>Florida.</u> -	
<u>Level of significance.</u> -.....	35
<u>Experience.</u> -.....	38
<u>Procedure.</u> -.....	38
<u>Raters.</u> -.....	39
<u>Stimuli.</u> -.....	40
<u>Ratings.</u> -.....	42

TABLE OF CONTENTS--continued

	PAGE
<u>Process measurement scales</u>	43
<u>Outcome measures</u>	46
<u>Hypotheses</u>	52
IV. ANALYSIS OF DATA.....	55
<u>Rater Reliabilities for Facilitative Conditions</u>	55
<u>Rater Reliabilities for Outcome Measures</u>	55
<u>Similarity Between Truax and Lister Scales</u> ...	57
<u>Correlations Between Facilitative Conditions</u> .	59
<u>Hypotheses Tested</u>	61
Hypothesis 1. (a).....	61
Hypothesis 1. (b).....	63
Hypothesis 1. (c).....	64
Hypothesis 1. (d).....	64
Hypothesis 2. (a).....	68
Hypothesis 2. (b).....	68
Hypothesis 2. (c).....	71
Hypothesis 2. (d).....	71
Hypothesis 2. (e).....	74
Hypothesis 2. (f).....	76
Hypothesis 2. (g).....	78
Hypothesis 2. (h).....	80
Hypothesis 2. (i).....	80

TABLE OF CONTENTS--continued

	PAGE
Hypothesis 2. (j).....	84
Hypothesis 2. (k).....	86
V. DISCUSSION.....	90
<u>Facilitative Conditions</u>	90
<u>Outcome Measures</u>	94
<u>Rating Methodology</u>	106
<u>Experience</u>	108
VI. SUMMARY.....	113
APPENDICES.....	118
A. Truax Scale of Accurate Empathy.....	119
B. Lister Scale for the Measurement..... of Empathic Understanding	123
C. Truax Scale of Nonpossessive Warmth.....	131
D. Lister Scale for the Measurement..... of Facilitative Warmth	134
E. Truax Scale of Therapist Genuineness.....	138
F. Lister Scale for the Measurement..... of Facilitative Genuineness	140
G. The Fowler Technical Effectiveness..... (TE) Scale	145
H. Anxiety Rating Scale.....	147
I. Depression Rating Scale.....	148
J. Revealingness Rating Scale.....	149
K. Kind of Crisis.....	153

TABLE OF CONTENTS--continued

	PAGE
L. Raw Data.....	167
BIBLIOGRAPHY.....	176
BIOGRAPHICAL SKETCH.....	186

LIST OF TABLES

TABLE	PAGE
1. Ebel intraclass correlations for ratings of..... facilitative condition scales and outcome measures	56
2. Pearson product-moment coefficients of correlation. between facilitative conditions	58
3. Regression analysis with F ratios for the..... regressions of variable X on variable Y	60
4. Analysis of variance and t tests using individual.. group variance (between) as best estimator of variance between professional trainee and lay volunteer groups on Truax's and Lister's empathy, warmth, genuineness and total conditions scores	62
5. Mean and standard deviations of professional trainee and lay volunteer groups on Truax and Lister facilitative scales	66
6. Chi square test of correlation on frequency of..... professional trainees in high-medium-low ranks on Truax's and Lister's total conditions scores	67
7. Pearson product-moment coefficients of correlation. between facilitative conditions and Fowler's Technical Effectiveness Scale (TE)	69
8. Pearson product-moment coefficients of correlation. between rated mean change score of anxiety levels in the caller and offered facilitative conditions	72
9. Analysis of variance comparing High CE Volunteer... and Low CE Volunteer groups on rated mean change scores of anxiety levels in the caller	73
10. Analysis of variance comparing professional..... trainee and lay volunteer groups on rated mean change scores of anxiety levels in the caller	75

LIST OF TABLES--continued

TABLE	PAGE
11. Pearson product-moment coefficients of..... correlation between rated mean change scores of depression levels in the caller and offered facilitative conditions	77
12. Analysis of variance comparing High CE..... Volunteer and Low CE Volunteer groups on rated mean change scores of depression levels in the caller	79
13. Analysis of variance comparing professional..... trainee and lay volunteer groups on rated mean change scores of depression levels in the caller	81
14. Pearson product-moment coefficients of correlation. between rated level of caller self-exploration and offered facilitative conditions	83
15. Analysis of variance comparing High CE Volunteer... and Low CE Volunteer groups on rated level of self-exploration of the caller	85
16. Analysis of variance comparing professional..... trainee and lay volunteer groups on rated level of self-exploration of the caller	87
17. Pearson product-moment coefficients of correlation. between rated change scores of affective states and rated level of self-exploration of the caller	88
18. Pearson product-moment coefficients of correlation. between experience on the phone and levels of offered facilitative conditions	110

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By

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Sixty-five untrained volunteers from the community and twenty-seven professional trainees or professionals engaged in a helping profession, who participated in telephone duty in a 24-hour suicide and crisis intervention service, were rated on both Truax's and Lister's facilitative scales of empathy, warmth and genuineness. (Data are available through the Crisis Worker Data Bank of the Suicide Prevention and Crisis Intervention Service, Gainesville, Florida.) A composite of these rated measures was described alternately in this study as either Total Conditions or as the Clinical Effectiveness (CE) of crisis workers. No significant differences were found between groups in age, sex or levels of experience on the telephone. Intense, but non-suicidal crisis calls were used as stimuli.

In Part I, lay volunteers were found to be offering

significantly greater amounts of empathy, warmth and total conditions to callers than professional trainees and professionals. No significant difference was found between groups for levels of offered genuineness. Lay volunteers had significantly higher levels of client self-exploration and talked on the phone longer. Results verified Carkhuff's (1968) contention of the therapeutic efficacy of nonprofessionals.

In Part II, an attempt was made to develop a series of outcome measures for research on the clinical effectiveness of crisis workers. It was found that empathy, warmth, genuineness and total conditions scores were significantly and positively related to such crisis center outcome measures as anxiety change scores, depression change scores and levels of self-exploration of the caller. These facilitative conditions were non-significantly but negatively related to both the technical effectiveness of the crisis worker on that call and to the general mean level of technical effectiveness of the worker. These findings were discussed in terms of Truax and Carkhuff's (1967) hypotheses about therapeutic functioning and the necessity for linking facilitative conditions to outcome measures to ensure predictive validity.

High functioning CE volunteers achieved significantly higher positive change scores on anxiety

levels, positive change scores on depression levels and higher levels of self-exploration of the caller than low CE volunteers.

Miscellaneous evidence found that positive change scores of anxiety and depression were significantly related to the levels of self-exploration of the caller. If the caller's affective state changed, he talked deeply about his feelings and problems. The crisis center telephone service seemed to help distressed callers.

This was the first investigation to: (1) use Truax's process variables as measures of clinical effectiveness in a crisis center, (2) find the high level of functioning of lay volunteers in actual telephone therapy situations, (3) demonstrate a significant link between facilitative conditions and a wide variety of crisis center outcome measures, (4) attempt a research paradigm on outcome measures in a crisis center, and (5) find Lister's scales to be reliable and efficacious as measures of assessment in a crisis center.

Results were discussed in terms of Truax and Carkhuff's model of personal rather than professional attributes as being potent attitude variables of therapeutic change. Lister's facilitative scales proved to be reliable and efficient and should provide

excellent selection, training and assessment tools for crisis centers. Findings supported the notion that the process variables of empathy, warmth and genuineness provide much of the variance in therapeutic change. Extending this finding to crisis center telephone therapy opens new avenues to further research on crisis worker effectiveness. Questions were raised concerning the predominant use of professionals to operate crisis center answering services.

CHAPTER I

INTRODUCTION

A recent phenomenon in the United States has been the implementation and proliferation of crisis centers (McGee, 1968; Waltzer & Harkoff, 1965). Several developments have occurred in delivering this service to the community. One development has been the increasing use of the telephone to establish contact. Another has been the use of the non-professional to staff the centers and handle the volume of client contacts. Finally, there has been a shift away from more traditional directive theories and therapies of crisis toward relationship models of intervention and helping.

As a community service, suicide prevention and crisis intervention centers deal primarily with problems of living rather than pathological states or conditions. These problems may be either suicidal acts or less lethal crises. At present, the majority of calls received by a center consist of crisis situations of the latter type. Research has shown that only a small percentage of calls to crisis centers have been from suicidal persons (Farberow, 1966; Haughton, 1968). For example, the center in Gainesville, Florida, receives approximately five crisis calls to every one call concerning a suicide attempt (Zelenka, 1971). As a result, many centers have been expanding

to provide other services (Brockopp, 1967). Centers now typically deal with such varied phenomena as personal adjustment problems, alcoholism, drug abuse, loneliness, marital problems, ambulatory schizophrenia, child and adolescent problems, vocational problems, legal problems, welfare cases, and many others. Accompanying this expansion of services in many centers has been the increasing experimentation using nonprofessions as therapeutic agents on the telephone (Holzberg & Knapp, 1965). The success of Los Angeles volunteers has been documented several times (Farberow, 1966; Heilig, 1967; Heilig, Farberow, Litman & Shneidman, 1968). The 1961 report by the Joint Committee of Mental Illness and Health originally suggested the use of nonprofessionals as an alternative to the problem of the lack of traditional professional personnel. An early program, stimulated by this report, trained lay personnel to function as therapists and provided some evidence to suggest that lay volunteers could perform effectively in facilitating the solution of people's problems (Rioch, Elkes, Flint, Usdansky, Newman & Sieber, 1963).

Since these beginnings, many lay volunteer programs have been introduced into the helping professions. However, only a few have systematically assessed volunteer therapeutic effectiveness in terms of process variables related in previous research to a variety of indices of constructive

client outcomes. Studies investigating dimensions such as a counselor's communication of empathy, warmth and genuineness have yielded the following conclusions:

1. There is extensive evidence to indicate that lay persons can be trained to function at minimally facilitative levels of conditions related to constructive client change over relatively short periods of time....
2. There is little evidence to indicate that professional trainee products are being trained to function effectively on any dimensions related to constructive client change over long periods of training....
3. Comparative statistics indicate the greater effectiveness of lay and lower level guidance training programs in eliciting constructive trainee change on those conditions related to constructive client change....
4. On both identical and converted indexes, lay trainees function at levels essentially as high or higher (never lower), and engage clients in counseling process movement at levels as high or higher, than professional trainees....
5. Evidence indicates that with or without training and/or supervision the patients of lay counselors do as well or better than the patients of professional counselors (Carkhuff, 1968, pp. 118-125).

Research on psychotherapists has shown that they are relatively stable in their levels of these conditions across several clients (Truax, Wargo, Frank, Imber, Battle, Hoehn-Saric, Nash, & Stone, 1966; Truax & Wargo, 1966). Other studies point rather conclusively to the therapist as the pulling force in the therapeutic dyad; he may either constructively help the client or destructively contribute to the client's problems (Truax & Carkhuff, 1964; 1967). Of the three variables, offering warmth

as a condition is the most potent factor as a predictor of successful outcome with verbal patients, followed in potency by genuineness and then empathy (Truax & Carkhuff, 1967). The effect of offering high facilitative conditions has been shown to generalize to other interpersonal situations with untrained persons being effective. It was found by Shapiro and Voog (1969) that even roommates affect each other depending on the level of conditions offered to each other, and that both constructive and hindering effects occurred. Truax and Mitchell (1971) comment on people who "habitually help or hurt the people they interact with." They state that:

If the untrained or minimally trained individual has a naturally high level of accurate empathy, nonpossessive warmth, genuineness and other interpersonal skills, then it seems likely, from the present vantage point, that individuals who spend time with him will be as helped, if not more helped, than if they were receiving formal counseling or psychotherapy from the socially sanctioned professional (Truax & Mitchell, 1971, p. 328).

Other investigations point to the effects that people who are untrained in any helping profession may have upon others in the general community. Shapiro, Krauss and Truax (1969) found that the disclosure of deeply personal events between family members was significantly related to the level of therapeutic conditions offered. Therefore, some evidence suggests that genuineness, warmth and empathy may be powerful determiners of a wide variety of desirable or destructive interpersonal outcomes.

Many writers have indirectly pointed out the necessity of providing these therapeutic conditions (empathy, warmth and genuineness) for constructive client outcomes. Among them, Caplan (1961) states that, "the individual in crisis may use it as a source of forward movement or growth" or "regress to the use of maladaptive devices to cope with the crisis." Other authors stress putting the person at ease, providing a lessening of confusion, guilt, insecurity, fear, and showing a willingness to become personally involved as major emphases in the telephone contact (Litman, Farberow, Shneidman, Heilig & Kramer, 1965). They also value showing great interest in the client, discerning his feelings, responding appropriately and being sensitive to emotional reactions with which the telephone therapist can empathize. In addition, the client is met with acceptance, patience and warmth (Kaplan & Litman, 1961). All of the efforts of the telephone crisis worker are directed toward providing conditions to effect constructive rather than destructive client change.

There is now extensive evidence that lay persons can offer moderately high levels of warmth, empathy and genuineness in several patient populations including hospitalized and outpatient neuropsychiatric patients, normals, juvenile delinquents and children (Carkhuff, 1968). No assessment of telephone helper effectiveness has appeared in the literature

(Garrell, 1969). No study has been made of untrained lay volunteers and professional trainees in crisis and suicide centers. Whether the above findings hold for that emergency setting has yet to be evaluated.

The problem.- The purpose of this study is to discriminate between untrained lay volunteers and professional trainees (and crisis center professionals) in their ability to offer therapeutic conditions (levels of empathy, warmth and genuineness) over the telephone. The results should shed light on those variables which might be taught to create more effective personnel, lay as well as professional, in crisis center training programs. This part of the study presents both a rationale for a clinical performance criterion, and a method for assessing crisis workers in relation to it.

Secondly, an initial exploratory attempt will be made to investigate the relationship of facilitative conditions to outcomes in crisis centers. This part of the investigation also is an attempt to discover which people are clinically effective in emergency situations. Since the client is absorbed into the center and exposed to several workers after the initial telephone contact, outcome research becomes increasingly more difficult with the variety of contacts. Therefore, outcomes directly related to the telephone call will be the principal source of the investigation. Outcome research has usually been ignored

in crisis center investigations and centers have had to exist solely on their face validity and survey data until very recently.

The last purpose of this investigation is to develop and adapt a training method for facilitative conditions for crisis workers using the telephone. Since Truax and Carkhuff's rating method is both time-consuming and somewhat difficult to understand, this research design will attempt to prove the efficacy of using the Lister rating method for facilitative conditions. This rating method is a more clear-cut and precise measurement and training tool.

CHAPTER II

REVIEW OF THE LITERATURE

Crisis Theory

The word "crisis" is usually used in the general sense. It suggests that the pressures of life have become intolerable and cannot be solved adequately by the person. Crises may range from typical developmental crises to atypical psychiatric emergencies (including suicide attempts), problems dealt with in crisis intervention services (McGee, 1968). Several writers (Caplan, 1961; Klein & Lindemann, 1961; McGee, 1968) have explained the process of crisis intervention in terms of allowing clients to reach an equilibrium or restore themselves to an even higher level of functioning. For them, the reasons telephone services provide intervention to clients seem to be:

1. Crisis intervention can reduce the effects of an emotionally disruptive situation;
2. Hospitalization can be avoided;
3. Constructive aspects of crisis situations can be promoted while destructive elements of crises can be diminished;
4. A large segment of the general population will only seek mental health assistance and be sensitive to rapid change during a period of emotional crisis;
5. Crisis intervention saves money, manpower and time of mental health professionals.

Theories of crisis have given the suicide and crisis prevention/intervention centers a rationale for providing a broad spectrum of emergency mental health services. Several writers (Cowen, Gardner & Zax, 1967; Farberow, Heilig & Litman, 1968; Farberow, 1966; Klein & Lindemann, 1961; McGee, 1965; Porter, 1966; Wilson, 1962) have outlined the theory of crisis that underlies most centers' everyday functioning.

Lindemann's (1944) paper on grief reactions is widely accepted as the starting point in the literature for viewing life crises as a focus of psychological intervention. Lindemann saw grief as a normal reaction to a distressing situation. However, he warned that without appropriate intervention techniques, the normal grief reaction could be denied or distorted without resolution. He asserted that crisis contained elements of stress, the response to the stress, and the resolution of the stress. Several symptoms were outlined as common, and Lindemann proposed a normal process of grief resolution which could be facilitated with mental health intervention. Grief "work" consisted of emancipating the person from the deceased, readjusting him to the environment, helping him form new relationships and express the intense emotions of grief.

Rapaport (1962) differentiated the concept of crisis from the concept of stress. Crisis states are comprised of (1) a hazardous event posing a threat, (2) a threat to instinctual need

is aroused, this need being linked to an earlier threat which resulted in feelings of vulnerability or conflict, and (3) a person lacking an ability to respond with adequate coping mechanisms. For Rapaport, a crisis is time-limited.

Caplan (1961) felt that crisis states are usually one to six weeks in duration and that the person will emit some behaviors in order to arrive at a solution or restore equilibrium in this time period. Caplan described the crisis process in steps. First, the impact of the event is felt, there is a rise in tension, and problem-solving mechanisms are usually attempted. If these fail, the person becomes more upset, feels ineffective, and attempts emergency problem-solving behaviors. The crisis state in the middle phase consists of a major cognitive disorganization, general feelings of helplessness and confusion. At this point the emotional state begins to reach a peak. If no relief is obtained, the post-traumatic stage occurs with the tension level being exhibited in anxiety, somatic complaints, depression, denial, and other attempts to discharge the tension. For Caplan, healthy crisis resolution consisted of correcting cognitive perceptions with new information. Other forms of problem-solving focused on the management of affect through awareness of feelings and the development of patterns of obtaining help by using interpersonal and institutional resources.

Crisis intervention capitalizes on adaptive coping mechanisms in the person. The crisis center explores the feelings of the

person to begin the adaptive process. Task-oriented activity is given to the caller with the purpose of breaking down problems into solvable parts, reality is rehearsed by anticipating and predicting outcomes of behavior, and the person is encouraged to seek out new models for identification and development of new interpersonal skills. Through the exploration of feelings, the crisis center theoretically is able to identify the factors that led to disruption and is able to clarify the precipitating stress to the person. Hill (1958) points out that stressors become crises only by definitions of the people in the situations. He provides the insight that external precipitating events may stabilize more than disorganize a family or person. He also commented on certain persons who are "crisis prone" and who experience stressors with greater frequency and greater severity than the average individual. They define these stressors as such but fail to learn or to possess resources to solve their problems.

Several theoretical viewpoints have been postulated in the literature on crisis theory. These include the ego psychology position (Caplan, 1961, Erickson, 1953), the psychoanalytic viewpoint (Jacobsen, 1965), the behavioristic position (Mechanic, 1967), the cognitive viewpoint (Taplin, 1971), and the humanistic or client-centered viewpoint (Carkhuff, 1969b; Truax & Carkhuff, 1967). Excellent reviews of this literature are beginning to appear (Darbonne, 1967) and editors concerned with crisis intervention are collecting writings of significant theoreticians in this field (Parad, 1965).

Ego psychology has probably contributed the most conceptual input toward crisis theory. Lindemann and Caplan established a community mental health program at Harvard in 1948 to begin applying ego-analytic concepts to people in crisis. Caplan (1964) generated much interest in his concept of homeostasis by stating that a person in crisis has experienced a larger problem than his usual learned coping skills can handle. This causes disequilibrium and resultant tension. He suggested that constructive or destructive adaptation could result from crisis situations. Ego psychology provided a means of offering brief therapy to the person to help his ego in its cognitive, synthesizing, and integrative functions. Crisis theory from this perspective deals with primary and secondary prevention (Cowen et al., 1967). Caplan stressed working with significant others in the traumatized person's life, preferred dealing with material in the present, focused on the specific situation of the person and recognized the growth potential in both the crisis situation and within the person. Caplan (1961) theorized that the outcome of crisis situations is controlled by the type of interaction that occurs between key figures in his milieu and the vulnerable person. These caretakers, other than family and friends, are agents of the community represented by doctors, teachers, professional mental health workers, clergymen, etc., who play an important role in helping people handle problems in a crisis.

Client-centered orientations have begun to develop a theory of crisis which emphasizes the importance of providing levels of

empathy, warmth, and genuineness in people's lives. Carkhuff (1969a) postulated that people who seek help through psychotherapy have failed to receive high levels of these conditions. The therapist must provide high levels of conditions for the person to resolve his life crises in a constructive, growth-enhancing direction. Carkhuff concluded that persons who seek professional help are usually in crisis. If the person is given high levels of therapeutic conditions by the helper, the crisis can be confronted and the person will reach a higher level of functioning. Evidence indicates that relatively high-functioning helpers acknowledge the crises in the client's life and deal quickly with these experiences (Alexik & Carkhuff, 1967; Friel, Kratochvil & Carkhuff, 1968). If the crisis and/or the feelings involved are avoided and not dealt with, a deterioration of functioning may occur. Carkhuff theorizes that when a high-functioning helper lowers his levels of therapeutic conditions beneath the minimum level during a crisis or during therapy, several effects occur. High-level functioning clients will continue to explore their feelings and problems while low-level functioning clients will be severely affected by the lower conditions offered by the helper. In whatever situation, Carkhuff concludes that crisis is the crux of the helping process.

In an excellent paper, Bergin (1963) has made the point that the helping relationship offered by mental health professionals

may be "for better or worse." In a similar manner, Turner and Cumming (1967) have noted the trend in mental health and crisis centers toward an emphasis on ego psychology. These centers apply Erickson's principle that solutions to crises may either be growth enhancing or deteriorating influences on personality development. Similarly, Wilson (1962) has noted that research on disasters demonstrates that it is not always damaging to mental health and may even have a positive outcome by equipping some people with a greater ability to cope with future emergencies. A new crisis theory model focusing on the relationship between the helper and helpee has emerged in the literature in recent years (Truax & Carkhuff, 1967). Carkhuff (1969a) theorizes that every person faces crises throughout life and that if high-level persons confront him with empathy, warmth and genuineness during these crises, the person will learn to function constructively. These high-level persons may be any friend, member of the family, teacher, coach or any member of the helping profession (i.e., a crisis worker).

Nonprofessional Telephone Therapists in Suicide
Prevention and Crisis Intervention Centers

The rapid growth of suicide and crisis intervention centers in recent years has been documented by McGee (1969b). Before 1958 there were only three known centers providing telephone crisis services. This number increased to 11 by 1965, 90 by 1968, and totaled 140 in 1971 (Resnik, 1970). In a recent survey, Fisher (1972) found 192 centers in the United States. Haughton (1968) found that in one year the number of centers increased from 45 to 75. He also sampled the number of calls taken by 24-hour crisis services in several cities. In 1966, the center in San Francisco received 15,000 calls, the Los Angeles center took 7,000 calls and the St. Louis center handled 1,600 calls. Interestingly, 11 of the current centers are in Florida

The common elements in all centers were seen by Farberow (1968) as: The use of the telephone as a therapeutic tool, the integration of the center into the network of community agencies, the referral of patients, and the use of nonprofessional volunteers. He stated that:

The first major change in the functioning of center occurred with the development of the telephone as the primary means of contact with persons needing help (Farberow, 1968, p. 469).

A second breakthrough occurred with the reliance on the use of the nonprofessional. With the increasing number of crisis centers and other community agencies offering mental health

services, it became obvious that the great shortages in trained manpower would become even more critical over time (Albee, 1963). Cowen et al. (1967) pointed to the increased use and training of nonprofessionals for mental health functions to reduce the strain on manpower resources. McGee (1969a) indicated that 80 percent of all surveyed centers used lay volunteers as well as professionals and that approximately 25 percent used only volunteers to answer crisis calls on the telephone. Farberow (1968) commented that 60 percent of the calls received at the Los Angeles center were handled by the nonprofessional volunteers. The investigations of Poser (1966), Rioch et al. (1963), and Truax and Carkhuff (1967) concluded that nonprofessional therapists could help troubled people. The history of the use of the nonprofessional volunteer has been reviewed extensively elsewhere by Truax and Carkhuff (1967). Nonprofessionals from all walks of life have been used in helping capacities such as case aides in work with children, big brothers, halfway house staff, companions to state hospital patients and volunteer nonprofessional crisis center telephone therapists (Heilig et al., 1968).

Despite growing reliance on the nonprofessional volunteer in suicide and crisis services, relatively little empirical

research has systematically evaluated their use in centers. No significant evaluations have been made of the efficacy of the nonprofessional or professional, or of the use of the telephone as a therapeutic tool. Neither the effectiveness of the use of crisis theory and therapy in centers, or the outcomes produced by the centers has been studied. Unfortunately, most articles provide subjective impressions. For example, Heilig et al. (1968) felt that volunteers were able to provide a relationship on the telephone that was more direct and friendly than professionals provided. Other indirect references to volunteer telephone crisis workers as therapists have appeared (Brockopp, 1967; Russel, 1970). Although not a direct outcome study, McGee, Pennington, and Hegert (1967) commented that the MMPI scales of Si and D were most significantly correlated with the length of time the volunteer stayed with the program. They also found that the Self-Acceptance (Sa) and Social Presence (Sp) scales of the CPI were significantly related to judges' global ratings of crisis worker performance. In a frequently cited study, Resnik (1968) found the majority of self-selected volunteers in one center to be either neurotic or psychotic. These volunteers as a group exhibited a higher incidence of suicidal behavior than the general population and handled far fewer calls than "normal" volunteers.

Although the use of nonprofessionals in crisis centers has rarely been researched, there is an increasing body of literature

which has assessed the effectiveness of nonprofessionals in general and which tends to conclude that there are minimally trained or untrained nonprofessionals providing effective treatment (Whiteley, 1969). Poser (1966) found that untrained female undergraduates were more successful than trained professionals in providing group therapy with chronic schizophrenic patients. However, Berenson, Carkhuff and Myrus (1966) found that professional counselors were rated higher in empathy, warmth and genuineness than the students' best available friends and that the students explored themselves more in interviews with the professionals. It is apparent from the literature that nonprofessionals are performing therapeutic roles with and without the aid of supervision. While calling for research to be done on the use of the nonprofessionals, Farberow et al. (1968) admitted that volunteers were allowed to engage in face-to-face therapy with patients in the Los Angeles center.

Research in suicide and crisis centers has not in the past used Truax and Carkhuff's (1967) measures of empathy, warmth and genuineness to assess volunteers who use the telephone. Nonetheless, an investigation by Hughes (1969) found that raters trained on the Truax Empathy Scale did not rate recordings of telephone interviews differently from face-to-face interviews for any given therapist. This result offered the possibility of generalizing from research on face-to-face psychotherapy and counseling to tape ratings of empathy on telephone calls. Several researchers

have also commented on supervisors using Truax and Carkhuff ratings in supervision of their workers at crisis centers (Heilig, et al., 1968; McGee, 1969b). Therefore, it seemed reasonable to investigate crisis worker performance with these measures in actual crisis service activities.

Facilitative Conditions

Research conducted on the therapist and client variables which have accounted for a variety of positive outcomes in psychotherapy have been termed the "facilitative conditions" (Truax & Carkhuff, 1967). In the literature, these variables are defined as empathy, warmth, and genuineness. Most studies use the rating method designed by Truax and Carkhuff (1967) or a similar rating method designed by Carkhuff (1967). Raters are trained to rate tape recordings of interviews, usually three minutes in duration. These ratings are then tested for interrater reliability and correlated with a wide variety of outcome measures. Truax and Carkhuff report rater reliabilities ranging from .2 to .9 for these rating scales and estimate the average rater reliability to be .7 for any one scale. Typically, each scale is rated by a separate rater to avoid contamination in the ratings. A wide variety of investigations report that therapist levels of empathy, warmth and genuineness are relatively stable across clients (Truax et al., 1966; Truax & Wargo, 1966).

The major Truax and Carkhuff (1967) work defines the rating scale of empathy:

Accurate empathy involves more than just the ability of the therapist to sense the client's or patient's "private world" as if it were his own. It also involves more than just his ability to know what the patient means. Accurate empathy involves both the therapist's sensitivity to current feelings and his verbal facility to communicate this understanding in a language attuned to the client's current feelings....It is not necessary - indeed it would seem undesirable - for the therapist to share the client's feelings in any sense that would require him to feel the same emotions. It is instead an appreciation and a sensitive awareness of those feelings. At deeper levels of empathy, it also involves enough understanding of patterns of human feelings and experience to sense feelings that the client only partially reveals. With such experience and knowledge, the therapist can communicate what the client clearly knows as well as meanings in the client's experience of which he is scarcely aware. (1967, p. 46)

Warmth is defined as:

The dimension of nonpossessive warmth or unconditional positive regard, ranges from a high level where the therapist warmly accepts the patient's experience as part of that person, without imposing conditions; to a low level where the therapist evaluates a patient or his feelings, expresses dislike or disapproval, or expresses warmth in a selective and evaluative way....Thus, a warm positive feeling toward the client may still rate quite low in this scale if it is given conditionally. Nonpossessive warmth for the client means accepting him as a person with human potentialities. It involves a nonpossessive caring for him as a separate person and, thus, a willingness to share equally his joys and aspirations or his depressions and failures. It involves valuing the patient as a person, separate from any evaluation of his behavior or thoughts....The therapist's response to the patient's thoughts or behaviors is a search for their meaning or value within the patient rather than disapproval or approval. (1967, p. 60)

Genuineness is described as:

This scale is an attempt to define five degrees of therapist genuineness, beginning at a very low level where the therapist presents a facade or defends and denies feelings; and continuing to a high level of self-congruence where the therapist is freely and deeply himself. A high level of self-congruence does not mean that the therapist must overtly express his feelings but only that he does not deny them. Thus, the therapist may be actively reflecting, interpreting, analyzing, or in other ways functioning as a therapist, but this functioning must be self-congruent, so that he is being himself in the moment rather than presenting a professional facade. Thus the therapist's response must be sincere rather than phony; it must express his real feelings or being rather than defensiveness. (1967, pp 68-69)

Truax, Carkhuff, Berenson and others have investigated the effects of the therapist's, counselor's or lay person's level of offered facilitative conditions. In a series of extensive studies (Berenson & Carkhuff, 1967; Carkhuff, 1968; Truax & Carkhuff, 1967) these authors have explored the effects of various levels of offered conditions upon the client's level of functioning. The results seem to indicate that: (1) There are wide variations in the levels which helping persons offer to clients; (2) clients who receive high levels of conditions are facilitated to improve in several objective measures of personality and social functioning; and (3) clients who receive low levels of offered conditions deteriorate in personality and interpersonal functioning. Also, when high levels of conditions are offered, the client increases his level of self-exploration or self-disclosure. In addition, it is a function

of the counselor rather than a result of the level of functioning of the client that dictates at what level the conditions will be offered during each specific time period of the helping relationship. It also appears that the counselor's ability to provide high-level facilitative conditions is increased to some extent through certain preparation programs and not through others (Carkhuff et al., 1969).

Several studies suggest that facilitative conditions are subject to change because of training. Bergin and Solomon (1963) studied the level of empathy provided by 18 post-intern clinical psychology students. They concluded that their sample of therapists were, by and large, ill-equipped to be of any assistance to any but the most seriously disturbed clients. In addition, their levels of offered conditions decreased from the first to last year of graduate training. Carkhuff, Piaget, and Pierce (1968) commented that persons at different stages in the helping professions show a corresponding difference in their level of offered facilitative conditions. They found freshmen in psychology courses to be functioning at a 1.5 level (on a 9-point scale), senior psychology students were functioning at a 1.9 level, and first-year graduate students were offering levels of conditions at the 2.3 level. None of these levels were adequate from Truax and Carkhuff's theoretical viewpoint. Carkhuff (1969b) reports that "at the beginning of graduate preparation, graduate students

in the helping professions are functioning at the highest level at which, on the average, they will ever function" (p. 259). The research from a variety of studies implies that at least half of the counseling or therapy relationships in which the typical client participates are apt to have harmful consequences to the client (Lister, 1970). Both Carkhuff (1968) and Truax and Carkhuff (1967) offer extensive reviews to suggest that lay people (trained or untrained) can offer moderately high levels of the facilitative conditions. However, whether these findings are applicable to untrained lay volunteers and professionally trained telephone crisis workers has yet to be investigated.

Belanger (1972) provided an extensive review of a large number of studies over the past decade which used the facilitative conditions and outcomes. He commented that:

The results have been overwhelmingly in favor of the hypothesis that the ratings are significantly related to outcome... The pattern has continued in recent years: Truax, 1968; Truax and Wargo, 1969; Shaw, 1970; Truax, 1970; Garfield and Bergin, 1971; Truax, Wittmer, and Wargo, 1971; Mullen, 1970; Truax and Mitchell, 1971. In compiling data from this prolific area of psychotherapy and counseling research, a consistent trend evolves which demonstrates that approximately 97% of all outcome measures used, in 42 studies from 1961 to the present, have been significantly related to ratings of genuineness, empathy, and warmth (1972, p. 4).

Not only does this strong relationship hold over time, it also appears to persist regardless of sample differences, theoretical

orientations, duration and type of therapy or counseling, type of client and type of measurement used to evaluate outcomes.

None of these variables effect the persistent relationship beteen ratings and outcome. Truax and Carkhuff (1967) comment:

Similarly. the findings for the importance of empathy, warmth, and genuineness do not seem to vary for patient populations despite differences of age, sex, personality, socioeconomic, and even culture differences (p. 129).

There is, then, much evidence to indicate the predictive validity of the conditions.

The client variable linked to the facilitative conditions has been termed "self-exploration". Truax and Carkhuff theorize that this process is what leads to positive personality change and increased functioning. Several other studies demonstrate that the levels of offered facilitative conditions are related to the depth of the client's self-exploration (Alexik & Carkhuff, 1967; Cannon & Pierce, 1968; Holder, Carkhuff & Berenson, 1967; Piaget, Berenson & Carkhuff, 1967).

Truax and Carkhuff (1967) have provided a review of several other areas of research that suggest that the outcomes generated by rated facilitative conditions may be generalized to other kinds of interpersonal and quasi-therapeutic interactions as well.

Several researchers have found low-level functioning parents to produce emotionally disturbed children (Baxter, Becker & Hooks, 1963; Bishop, 1951; Bowen, 1960; Schulman, Shoemaker & Moelis, 1962), opinion change to be related to feelings of warmth toward

the communicator (Winthrop, 1958; Zimbardo, 1960), college grades to be associated with the level of facilitative conditions of the roommate (Shapiro & Voog, 1969), and groups displaying high levels of liking to have greater influence over each other (Berkowitz, 1954). While not conclusive, Truax and Carkhuff (1967) conclude that these studies do present a pattern whereby the levels of conditions offered may lead to striking varieties of constructive or destructive interpersonal outcomes.

Crisis Center Outcomes

Few researchers have sought to develop outcome measures to assess the effectiveness of telephone crisis workers or suicide and crisis services. In an early study, McGee (1968) attempted to rate volunteer performance. However, due to the small sample size (22 volunteers), he was unable to predict future success. In addition, his rating method seemed too complicated to be of practical use to other crisis centers. There still remained the need for developing predictors and assessment tools for use in screening, training and evaluating crisis workers whose primary function is telephone contact with distressed people.

Centers were virtually forced to judge their workers' and their centers' performance on face validity. In response to the need for more accurate assessment, an instrument was developed by Fowler and McGee (1971). This Technical Effectiveness (TE) Scale (as described in the Outcome Measurements Section of this paper) evaluated the telephone activities of the crisis worker.

behaviors which the center had explicitly trained the worker to perform as fundamental duties. Finding the rating of this scale to be highly reliable, the SCIS then regarded this instrument as both a process and outcome measure. It was believed that having technically effective crisis workers was one standard of outcome for crisis services. However, no research using the TE scale was generated until this present investigation was undertaken.

The evaluation of the success of the intervention in crisis centers has been made more difficult because of the nature of the intervention process. McGee et al. (1972) have commented that the interaction between a person in crisis and the crisis center typically follows a four-stage pattern. This consists of the initial contact between the caller and a crisis worker who answers the phone (frequently the only contact made with the center), a period of management of the case, a transfer to another agency and a follow-up call (Zelenka, Marcus & Bercun, 1971). Zelenka et al. felt that the outcomes and the measures needed to assess these outcomes may be different for each phase of this process. After the initial phone contact, the caller is diverted away from contact with any one crisis worker and begins to be involved with many workers in the center. It is therefore more difficult to pinpoint the factors influencing the outcome after this initial phone call because the relationship of the caller

to the center becomes complex and changing. This is a primary reason that this investigation concentrated on the outcome effects of the crisis worker due to his interaction with the initial call of the helpee.

A preliminary investigation by Brasington (1971) at the SCIS attempted to study this initial telephone contact. Murphy and Wetzel (1967) have shown that the principal motive for 80 percent of the calls to a St. Louis crisis center was the client's disturbed affective state. Therefore, Brasington's (1971) outcome measure for 20 phone calls was the reduction of affective states from the beginning to the end of the call. He measured the level of anxiety and depression and the affectual changes during the taped call by using subjective ratings. While finding no significant change scores in speech rate, silent pauses or Ah-Ratios from the beginning to the end of phone calls, he did find significant differences in ratings of initial to final anxiety ($p < .001$) and depression ($p < .02$). The anxiety and depression levels dropped significantly during the call. Brasington concluded that an important and desired outcome of the crisis intervention process is the lessening of the distressed affective states of the caller.

Another preliminary line of research was begun at the SCIS by Dillon (1971). He investigated the relationship between personality correlates and two of Carkhuff's facilitative conditions scales on "hotline" telephone calls. The hotline is a specialized

service of the crisis center which deals with minor problems of youth. It is therefore difficult to generalize Dillon's findings to other research investigating crisis workers' performance.

Dillon was unable to achieve any interrater reliability for his empathy scale ($r = .00$), but did reach an acceptable level of reliability for his genuineness ratings ($r = .70$). His sample of 42 hotline workers included eight who had been trained in the helping professions. Only one minor analysis was made between these two groups in his study. In order to increase his sample size, he included taped calls of less than three minutes' duration in his sample. The sample of hotline phone tape segments was gathered for calls recorded during the month of June, 1970. However, tape segments from earlier hotline calls were also placed in the sample.

Dillon found only four out of 52 correlations between the CPI scale scores and empathy and genuineness ratings to be significant. Minor correlations were also found between the Philosophy of Human Nature scale scores and Carkhuff's two rated facilitative conditions. Because of the large number of correlations tested, these findings appeared spurious. There was no discernible pattern of personality variables evident in this study which would predict the level of offered facilitative conditions.

Dillon did find that the length of the call and the amount of self-disclosure were both significantly related to ratings of

empathy and self-exploration. No differences were found between clinically and non-clinically trained helpers, age, sex, or training group for the length of the phone calls. This study did demonstrate that ratings of genuineness were significantly greater for hotline workers who had longer calls than for workers who had shorter calls ($p < .01$). The use of a sample with several uncontrolled variables, the failure to achieve rater reliability for the empathy scale, the failure to rate warmth as a variable, and use of only a small number of outcome variables left this study open to serious methodological questions. However, Dillon did make the first attempt to relate facilitative conditions to outcome variables in hotline services.

Belanger (1972) investigated the relationship between the CPI and PHN test scores on the same sample as that used in the present investigation. In a well-designed statistical study using the same method and data as the present study, he found that two factor-analyzed clusters of test items defined as "stability" and "extraversion" emerged, as did a "flexibility" scale he developed statistically. Using these items, he could accurately predict the volunteers in the sample who scored in the lowest 10 percent on empathy, warmth and genuineness as rated by Truax and Carkhuff's (1967) rating scales. Belanger developed his own Clinical Effectiveness Scale (Ce-72) Scale) to predict the lowest functioning crisis workers at the SCIS. Unable to

eliminate error variance from his data, he could not accurately predict the highest 10 percent or highest 90 percent of facilitative crisis workers without misclassifying. Using his Clinical Effectiveness Scale under conditions of blind analysis, Belanger was able to accurately classify three of the four lowest functioning crisis workers in another center by their test scores. Belanger hypothesized that his factors accounted for most of the variance in predicting clinical effectiveness and that the other 18 standard CPI scales would not add significantly to prediction. This might explain why none of the studies exploring personality correlates of facilitative conditions using the CPI have found significant patterns.

In a recent paper, Ansel (1972) reported on a current investigation using the same SCIS subject pool but not the same data or method as the present investigation. He found that a few predictors of successful volunteer telephone workers (those rated high on genuineness and high on the Fowler Technical Effectiveness Scale) were items found on the CPI Test. Having children was correlated to the length of stay in the center as a volunteer, but the achievement through conformity scale (Ac) and the sense of well-being (Wb) scales were negatively correlated to technical effectiveness. Basically, no other significant predictors on the CPI occurred despite many statistical analyses. Interestingly, a very significant correlation was found between

high-rated genuineness (using the Lister method) and technical effectiveness of the volunteer on the specific call ($r = .89$). In addition, being single was negatively related to high scores on technical effectiveness. This investigation attempted to discover personality correlates to outcomes in crisis work. However, the outcome measures used did not appear to be of sufficient number or strength to draw any conclusions. It is also questionable why, of the three therapeutic conditions usually used in research, only genuineness was rated, as genuineness is typically the hardest scale upon which to achieve inter-rater reliability.

By dividing up the process of case development into four phases (opening, management, closing or transfer, and follow-up), many of the problems of outcome research in crisis work become evident (Zelenka, 1971). Quantitative measures for process evaluation during the management phase still remain to be developed. Once the client is involved in the center's activities, he or she encounters a variety of crisis workers and professional staff. The antecedents to outcome then become most difficult to analyze.

The third phase of closing a case is a logical point at which to evaluate case outcome, since it is usually at the point of closing that the crisis service has made its last formal intervention contact with the client. A case may be considered

closed when the individual has been transferred to another agency and/or when crisis center services no longer seem appropriate for the client. The case may also be closed when the client himself desires to terminate his contact with the crisis center.

A primary theoretical goal of crisis intervention is case transfer. Case transfer in itself is not always a desirable outcome. One would be also tempted to evaluate outcomes of the crisis center in terms of the other agencies' successess or failures with the transferred case. Zelenka et al. (1971) comment that this is at best a questionable outcome for the referring center. It is, principally, an outcome for only the other agency.

Marcus (1970) investigated the outcome of the fourth phase of crisis center activity, the follow-up on closed cases. By mailed questionnaires, she asked how satisfied the client was with the crisis intervention work performed with the client while that person was involved with the SCIS. Marcus recontacted clients at specific time intervals of 30-day periods. She received more responses from clients if she contacted them between 30 and 90 days after their involvement with the center had been terminated. In addition, she discovered that the SCIS was performing primarily as a helping agency in and of itself. It was not generating much transfer activity with clients' cases despite

explicit policy and procedural statements. Marcus also discovered that clients viewed recontact with the center as an appropriate and valuable service of the crisis center. However, her study was contaminated by social desirability bias in returned questionnaires.

Due to many methodological and practical problems encountered in outcome research in crisis centers, a focused approach to investigating the success of crisis workers was attempted in this investigation. Research was primarily focused upon the first phase of case development. Several outcome measurements relating to the initial phone call were then tested. In addition, the third phase of case development, case closure, was analyzed to test the relationships between facilitative conditions (TE) and outcomes in crisis centers.

Unfortunately, none of the studies reviewed in this section made a serious attempt at evaluating outcomes of crisis worker performance. The second part of the present research design attempts to initiate an investigation into the relationships between clinical effectiveness, facilitative conditions, technical effectiveness and a variety of crisis center outcomes.

CHAPTER III

METHOD

Subjects:- Two distinct populations were studied: (a) lay volunteers, and (b) professional trainees and professionals. The lay volunteers included 65 crisis workers who had never been trained in any helping profession before coming to work at the Suicide and Crisis Intervention Service (SCIS) in Gainesville, Florida. This first group of subjects ranged in occupation from housewives to undergraduate students in diverse non-helping oriented disciplines. The second group of 27 crisis workers consisted of professional trainees (advanced graduate students in clinical psychology and counselor education with at least some clinical experience at the University of Florida) and professionals such as paid staff workers of the SCIS (4), social workers (2), and one minister who used pastoral counseling in his profession. The professionals and professional trainees were all involved in achieving or maintaining a professional role in a helping profession.

Age and sex of sample:- There were no significant differences in the distribution of age or sex for the two groups. The non-professional group consisted of 40 percent male crisis workers

with an overall group mean age of 27.40 years. Similarly, the professional group was made up of 53 percent male crisis workers with an overall mean age of 28.25 years. All subjects were Caucasian.

Suicide and Crisis Intervention Service of Gainesville, Florida.- The Suicide and Crisis Intervention Service (SCIS) of Alachua County was opened in December, 1969, in the city of Gainesville, Florida (McGee, 1969b). It was designed as a center which provides assistance by phone, sends out trained "care teams" to people in serious crisis and provides emergency counseling at the center. The center was funded by the National Institute of Mental Health to facilitate research on telephone workers. Zelenka (1971) surveyed and reported on activities and the parameters of the population sampled in this investigation. Data are available by writing to the director of the SCIS.

Level of significance.- As was his prerogative, the experimenter chose the .10 level of significance for this investigation. Employing a .10 level indicates that one out of ten findings reaches this level of significance by chance. Use of this decision rule confronted the problem of relative losses incurred by making omission errors in psychological research.

The arbitrary .10 level was chosen instead of the .01 or .05 levels for several reasons. First, this investigation

is being attempted in a relatively unexplored area of research, crisis center and crisis worker effectiveness. If differences between groups and kinds of workers, relationships between facilitative conditions and outcome measures, and training, screening and assessment tools do exist, it is very important not to error in the direction of accepting false negative findings, i.e. that no significant differences exist. This area of research needs a base of initial findings. Researchers may then replicate or reject these findings and diminish the need for centers to exist on face validity. Thus potential losses in crisis center research (unknown effectiveness of workers dealing with suicidal callers, unresolved destructive life crises, cost of running centers and training workers) are too high to risk a false negative decision.

A minimum-maximum expected loss model caused the experimenter to set up a probability statement and decision rule that minimized the chance of dismissing any probable results. It was felt that exploratory research where the direction of relationships is unknown demands less powerful decision rules. There is more utility in discovering any relationships that might exist than in losing information with highly powerful tests of significance.

Secondly, the power of a test is also affected by increases in the sample size and/or decreases in the

standard deviation of the population by controlling variables. Since the sample size in this investigation is fairly large (approximately 100) and it was felt that it was a well-controlled study, very little power is lost by employing a slightly lower level of significance than usual.

Hays (1966) reports that the power of a .10 or .05 level of significance is not a final statement of results. A .10 level does provide a circumstance where the loss-value of errors may be too small to risk a high decision rule using a .01 or .05 level of significance (Hays, p. 273). Obviously, any one study or any one finding is causally inconclusive. Since any results are so important to crisis center research, this investigation will have to be replicated anyway.

Finally, since three main variables (empathy, warmth and genuineness) are being studied, the probability of two or of all three being significantly related to other variables or discriminating between groups by chance is very small. If only one of the main variables is significant at a .10, .05 or .01 level of significance, very minimal conclusions can be drawn. In this instance, use of the .10 level rather than the .05 or .01 levels of significance loses little utility. Thus, the potential loss of discovering any probable results is too high to justify the use of a rigid level of significance. Therefore, the .10 level of significance was employed as the decision rule in this investigation.

Experience.- Experience in training was the main variable being investigated in this research design. The variable of experience on the telephone was not systematically controlled, but an analysis revealed that it was not significantly different for the two experimental groups ($t = 0.73$). This result possibly occurred because the sample was drawn early in the center's history before differences appeared in the mean number of calls taken by professional trainees and nonprofessional lay volunteers (see DISCUSSION Section).

Procedure.- Ninety-two tape segments from initial crisis calls to the SCIS were obtained with the permission of its director. The segments were randomly selected from the data bank at the Center for Crisis Intervention Research, University of Florida, Gainesville, Florida (a section of the SCIS). These tape segments were edited to remove identifying data and were presented to three groups of raters. Each group of raters had been trained to rate one scale of facilitative conditions. All of the rating was directed toward the communication of the crisis worker on the tape and not that of the caller. The raters then rated the level of facilitative condition that the crisis worker conveyed.

A rating method similar to that used by Truax and Carkhuff (1967) was used. In addition, several analagous but more differentiated rating scales for empathy, warmth and genuineness developed by Lister (1970) were employed in the hope of developing an effective training device (See DISCUSSION Section).

Raters.- Twenty-seven undergraduate students in an Introductory Psychology course at the University of Florida served as raters for facilitative conditions. They were selected by volunteering and were given course credit for their participation. At the outset of the experiment, the raters were randomly divided into one of three groups, each group rating a different variable. All groups of these raters were formally trained for two hours. This training included learning the procedure for scoring, defining the scale to be rated, checking the reliabilities in a group discussion situation, listening to and rating 10 previously rated three-minute tape segments from the SCIS, and having the investigator answer any questions that the raters had. They were then asked to go home and memorize the two methods of rating (Truax and Lister) their scale and were asked to rate as honestly as possible. They then were given the following to take home, complete and study: (1) A practice sheet of written conversations to rate, (2) a copy of Truax's rating stages with each stage defined, and (3) a copy of Lister's component rating method with each component defined (see APPENDICES A to F).

Stimuli.- The 92 randomized tape segments, each of three minutes' duration, were employed in the experiment. Each segment consisted of material from the second through the fourth minute of an initial crisis call to the SCIS. Tape segments were randomly chosen from the files of taped calls at the center according to the following criteria: (1) the call had to be at least six minutes in duration, (2) it had to have been taped during the first year of the center's operation (which controlled somewhat for experience factors) and (3) the call had to be judged by the experimenter as a crisis of at least minimal intensity.

The investigator informally rated each caller's level of distress and the intensity of his help-seeking efforts on each tape segment. This rating was done by employing a one to five Likert scale ranging from low intensity (1) to extreme intensity and distress (5). All calls rated at level one were eliminated from the data. A description and the rating of each call may be found in APPENDIX K. A statistical analysis computed for the mean level of intensity of rated calls for the two experimental groups (lay volunteers and professional trainees) proved non-significant ($t = 0.46$). The lay volunteer group had a rated mean intensity level of callers of 3.15. The professional trainee group had a mean caller level of 3.25 for rated intensity of calls. APPENDIX K showed that the calls could be roughly divided upon the dimension of internal-external loci of distressful stimuli to the caller. This translated into three main primary problem areas:

1. Primarily an affective state was distressing the caller. These problems included depression, anxiety, combinations of both anxiety and depression, anger, feelings of inadequacy, hopelessness, helplessness, loneliness, uselessness, confusion, disturbed thoughts, labile affect, feelings of "going crazy", fear, finding no good reason to live, etc. The group of calls comprised 50 percent of the sample.
2. Primarily a relationship was distressing the caller. These calls included spouses wanting divorces, anger directed at others, boyfriend jilting girlfriend, having no friends, not liking their family, tense home situations with caller wanting to run away from home, alcoholic spouses wanting to kill the other spouse, etc. All of these calls had affective content but the caller felt that the relationship was causing the most problem. This group of calls comprised 27 percent of the sample.
3. A combination of an affective state with additional problems in relationships which were causing distress. These calls included anxiety and depression associated with separation from family or friends, bereavement over death of family member or spouse, marital problems which cause emotional upset, pregnancy with boyfriend leaving, problems with parents with accompanying emotional distress, angry person who cannot get along with others, drinking heavily over losing friendship, feeling alone and inadequate because of inability to develop relationships with girls, person prevented from seeing his children, etc. This group of calls comprised 23 percent of the sample.

The investigator defined calls as being of minimal crisis intensity. This was judged when the caller's affective state had reached such a level of distress or disequilibrium that the

crisis worker could potentially offer the highest levels of empathy, warmth and genuineness to the caller. Any call which fell into one of the above categories and which was rated as distressful by the investigator was included in the sample.

These calls had to allow the crisis worker to be able to:

(a) Respond to the client's full range of feelings or experiences, (b) communicate warmth to the caller without restriction and to be able to share the caller's feelings with intensity and (c) not fall into defensiveness or retreat into professionalism but to be freely and deeply himself in the telephone relationship.

Calls about jobs, information seeking and calls about other people's crises were excluded. Calls about suicide attempts in progress were not used because the crisis workers often reacted in a directive and information-seeking fashion where no facilitative conditions were conveyed.

A break of one-minute duration occurred between tape segments to give the rater ample time to rate the tape segment. The samples were placed on four reels of Scotch Magnetic Tape and played to the raters on a Wollensak T-3000 tape recorder.

Ratings. - The raters rated the tape segments in two separate three-hour sessions occurring two weeks apart. Each rater brought with him the materials defining his scale. He was given a score sheet and an index card with scoring procedures written on it.

The raters first rated each tape segment according to Truax's stage method. Then they rated the same segment on a different kind of rating scale, Lister's component method. One (1) was the lowest rating on all scales.

Process measurement scales.- The Accurate Empathy Scale attempts to investigate an individual's ability to recognize, sense, and understand the feelings that another person has associated with his own behavioral and verbal expressions. The rater judges how accurately the helper communicates this understanding to him. It was rated on a 9-point definitional scale using the Truax method (Truax & Carkhuff, 1967; see APPENDIX A). It was also rated as an additive 38-point, eight-component scale using the Lister (1970) method (see APPENDIX B).

Truax and Carkhuff (1967), reporting on a series of 28 studies of interrater reliabilities for the Truax method of rating empathy, found the reliabilities to range from .43 to .95 with most falling between .70 and .80. Lister reported interrater reliabilities ranging from .81 to .94 for the Lister method of rating empathy and found an average correlation of .85 when raters, previously trained to rate according to the Truax method, rated by the Lister method on the same Arkansas training tape segments.

The Warmth Scale investigates whether a person expresses an honest concern that what the other person does is of real importance to the first person. This scale is also defined in terms of caring, respect or positive regard in the literature. It was rated as a five-point scale according to the Truax rating method (Truax & Carkhuff, 1967; see APPENDIX C). It was also rated as an additive 15-point, two-component scale using the Lister (1970) rating method (see APPENDIX D).

Truax and Carkhuff (1967) reported on a series of 24 studies with interrater reliabilities for the Truax method of rating warmth which ranged from .48 to .95 with an average reliability of .72. Lister found interrater reliabilities ranging from .86 to .96 for the Lister method of rating warmth and found an average correlation of .91 when raters previously trained to rate the Truax method, rated by the Lister method on the same Arkansas training tape segments.

The Genuineness Scale attempts to measure how the helper expresses what he truly feels in a nondestructive manner without insincere professional role playing. In the literature it is termed therapist self-congruence. It was rated on a five-point scale using the Truax method of rating (Truax & Carkhuff, 1967; see APPENDIX E). It was also rated by the Lister (1970) method of rating on a 28-point, five-component scale (see APPENDIX F).

Reporting on a series of 20 studies, Truax and Carkhuff (1967) found interrater reliabilities for the Truax method of rating genuineness which ranged from .40 to .95 with an average reliability of .58 (which is lower than the other two scales). Lister reported interrater reliabilities ranging from .84 to .93 for the Lister method of rating genuineness and found a correlation of .89 when raters previously trained to rate the Truax method, rated by the Lister method on the same Arkansas training tape segments.

The Total Conditions Score (CE) was a score consisting of the three facilitative conditions scores (empathy, warmth and genuineness) added together. This additive score was then divided by the number three to arrive at a composite total conditions score. For example:

$$\frac{E + W + G}{3} = CE$$

The additive score is thought to represent a global measure of overall facilitation for the therapist or counselor (Truax & Carkhuff, 1967). These authors reported that the total conditions score was often a better predictor of client outcome than any of the three scores considered separately. This was frequently true when one of the scales was negatively correlated to the other two scales or when a zero correlation existed between any pairings of the three scales. In this data analysis, both the Truax method of rating empathy, warmth and genuineness and the Lister method of rating these facilitative conditions

had a total conditions score computed for them. These two scores (a Truax Total Conditions Score and a Lister Total Conditions Score) were used as a process variable in this investigation. The Truax Total Conditions Score was used and labelled CE (Clinical Effectiveness) in the Outcome section (Part II) of this investigation.

Outcome measures. - The Fowler Technical Effectiveness Scale (TE) was developed by Fowler and McGee (1971) to assess the extent to which a person performed those tasks on the telephone that he had been explicitly trained to perform, and which the center recognized as the fundamental duties of the worker. This rating device consists of a seven-point scale; it becomes a nine-point scale if a suicide call is being rated (see APPENDIX G). The TE scale was derived from criteria suggested by the Los Angeles center (Litman, Farberow, Shneidman, Heilig & Kramer, 1965). It assesses three overlapping functions of the crisis worker, securing the communication, evaluating the caller's condition and assessing lethality and formulating a treatment plan to mobilize the caller.

The TE scale was found to have an interrater reliability coefficient ranging from .92 to .99 in several pilot studies and was also discovered to be reliable over time when used by only one rater. It was then considered for use in the SCIS as both a process and an outcome variable.

Two outcome measures were derived from TE ratings: (1) the TE rating on the specific phone calls used in this study, and (2) the mean TE rating of the crisis worker in all the taped initial phone interactions in which the worker participated during the first year of the center's functioning or until the time of the sampling.

While neither the number of raters used for the TE ratings nor the interrater reliabilities were specified by Fowler for this investigation, the present study included 55 volunteer subjects from the pilot TE studies mentioned above. Since the TE reliability coefficients in the pilot studies were highly significant and consistent over time, the TE ratings used in this investigation were thought to be highly reliable.

Almost no professional trainees were rated on TE in the pilot study so no comparison between volunteers and trainees was made in this investigation. Later in the center's existence, the trainee group provided less and less direct client service and provided less usable outcome data in the center's data bank. Therefore, analyses were computed between the total sample of crisis workers and their affect on outcome measures. Minor analyses were computed between (a) the lay volunteer and professional trainee groups and (b) the high- and low-functioning (CE) groups of lay volunteers and their scores on outcome measures. Because of the small number of subjects and because it was not the main intent of this investigation, no analyses were computed between high- and low-functioning professional trainees and their scores on outcome measures.

The rating of anxiety in the beginning and the end of the call was a primary outcome measure in this research design. Since most of the research data available to the crisis center are taped verbal behavior, this dimension represented several potential outcome measures. Shneidman labelled the caller's affective disturbance over the telephone "perturbation". Murphy and Wetzel (1967) found most of the calls to a center to be caused by intense affective states. Brasington (1971) discovered significantly decreased levels of anxiety and depression from the beginning to the end of phone calls. In addition, a substantial amount of research is available on the relationship between verbal behavior and anxiety. Auld and Murray (1955) have reviewed the literature elsewhere, as have Pope and Siegman (1965).

Brasington (1971) reported on a subjective rating method using four raters to judge the level of anxiety in time periods on taped telephone calls. After dropping the most discrepant rating, he found 54 percent of the remaining three ratings to be in total agreement on a five-point Likert scale. He also found that in 46 percent of the ratings, two of the raters agreed on the numerical value and the other rater either rated it one interval above or below, i. e., 2, 3, 2. It was felt to be a reliable rating method.

This procedure was duplicated in this investigation to rate as an outcome measure the differences in initial and final

levels of anxiety on the phone calls. However, unlike Brasington's design, the calls were controlled for length and only the initial interval of 60-90 seconds and the final interval of 150-180 seconds of the recorded phone call were rated for anxiety level.

Three female research assistants from the Children's Memorial Hospital Child Guidance Clinic rated anxiety on tape segments from the three-minute recorded phone calls previously rated for facilitative conditions. This rating occurred in a 150-minute rating session on May 1, 1972, using the Anxiety Rating Scale (see APPENDIX H). The tape segments were randomized somewhat by skipping tape segments periodically and rating these segments later. This procedure eliminated the possibility of the rater biasing his ratings by knowing which segments were the initial ones and which were the final segments. The raters were instructed to rate on a One to Five scale the level of anxiety of the caller on the tape segment. Interrater reliability was computed and statistical analyses were performed. The relationship was tested between change scores of rated anxiety on phone calls and (1) levels of offered facilitative conditions, (2) high- and low-functioning groups of volunteers (on CE) and (3) lay volunteer and professional trainee groups.

The rating of the client's depression in the beginning and the end of the call was another outcome measure. Ratings of depression have been less well researched than ratings of anxiety. However, Hamburg, Sabshin, Board, Grinker, Korshin,

Basowite, Heath and Persky, 1958; Pope and Siegman (1970) and Brasington (1971) have shown that depression can be rated subjectively with high reliability. Brasington (1971) found that three of his four raters were in total agreement on 58 percent of the rated tape segments in his study. In 40 percent of the depression ratings, two of the raters agreed on the numerical value (one to five on a Likert scale) and the other rater either rated it one above or one below, i. e., 2,3,2. Brasington's investigation was the only one reported in the literature on taped telephone verbal behavior. He felt that he had achieved highly reliable ratings with his design.

This rating method was followed in the present investigation. Raters judged the level of depression, no depression to extreme depression, for the phone call tape segment interval of 60-90 seconds and 150-180 seconds.

Depression was rated one week later on May 8, 1972, by the same three raters who had previously rated anxiety. A similar procedure was employed in which the three-minute tape segments previously used in rating facilitative conditions were randomized by skipping backward and forward throughout the tape. This method was thought to eliminate bias in the ratings on the Depression Rating Scale (see APPENDIX I). The raters were again instructed to rate on a One to Five scale the level of depression of the caller on the 30-second tape segment.

Interrater reliability was computed and statistical analyses were performed. Tests of relationship were performed between change scores of rated depression and (1) levels of offered conditions, (2) high- and low-functioning volunteers (on CE) and (3) lay volunteer and professional trainee groups.

The level of self-exploration of the caller was used as the last outcome measure. This measure was rated on a Zero to Five point definitional scale developed by Suchman (1965). The Suchman Revealingness Scale (REV) was developed to rate self-exploration or self-disclosure on recorded tape segments in interviews (see APPENDIX J). An extensive review on the derivation and research of this rating instrument can be found in Suchman, Epting and Barker (1966). The rater reliabilities in past research using this scale range from .56 to .90, depending on the amount of time spent training the raters (Suchman, 1965, 1966). Haggerty (1964) has presented a correlational study with extensively trained raters and was able to achieve a median inter-judge reliability coefficient of .72. Knickerbocker (1971), following a training method suggested by Suchman (1966), achieved Pearson correlations ranging from .60 to .74 for three raters. The REV Scale is similar to Rogers' (1958) "manner of relating" scale and reflects both the content and style of communication during a period of ongoing interaction.

The same three raters used to previously rate anxiety and depression were asked to again rate self-exploration on tape segments. This rating occurred two weeks after anxiety was rated

and one week after depression was rated. The raters were asked to read the rating scale and the investigator answered any questions they had about the levels of the scales. The raters were then asked to rate the caller's highest level of self-exploration on each three-minute tape segment. These ratings were then subjected to computation for interrater reliability and statistical analyses were performed. Tests of relationship were performed between levels of self-exploration on phone calls and (1) levels of offered facilitative conditions, (2) high- and low-functioning groups of volunteers (on CE) and (3) lay volunteer and professional trainee groups.

Hypotheses.- Hypothesis 1: There will be a significant difference in offered facilitative therapeutic conditions between lay volunteers and professional trainees (and crisis center professionals). The lay volunteer group will provide higher levels of conditions.

Part I

The following null hypotheses were studied to test this main directional hypothesis:

1. (a) There will be no significant difference between experimental groups in mean levels of offered empathy on either the Truax or Lister empathy rating scales.
1. (b) There will be no significant difference between experimental groups in mean levels of offered warmth on either the Truax or Lister warmth rating scales.
1. (c) There will be no significant difference between experimental groups in mean levels of offered genuineness on either the Truax or Lister genuineness rating scales.

1. (d) After deriving a clinical effectiveness (CE) score from a composite of the three facilitative condition scores, there will be no significant difference between experimental groups in mean levels of offered total conditions on either the Truax or Lister total conditions score.

Hypothesis 2: Telephone therapists offering high levels of facilitative conditions will be significantly different than telephone therapists offering low levels of facilitative conditions on a wide variety of outcome measures. High functioning telephone therapists will offer conditions that will produce more successful client outcomes.

Part II

The following null hypotheses were studied to test this main directional hypothesis:

2. (a) There will be no significant relationship between the eight facilitative condition variables and the technical effectiveness score of the volunteer telephone worker on the specific phone call rated for these variables.

2. (b) There will be no significant relationship between the eight facilitative condition variables and the mean score of all the technical effectiveness rated calls up to the time of the sampling for the volunteer telephone worker.

2. (c) There will be no significant relationship between the level of offered facilitative conditions and the rated anxiety change scores of the caller for the total sample of crisis workers.

2. (d) After further partitioning the data, there will be no significant difference between the volunteer group scoring high and the volunteer group scoring low on clinical effectiveness in the mean rated anxiety change scores of the caller.

2. (e) Repartitioning the data, there will be no significant difference between the lay volunteer group and the professional trainee group in the mean level of rated anxiety change score of the caller.
2. (f) There will be no significant relationship between the level of offered facilitative conditions and the rated depression change score of the caller for the total sample of crisis workers.
2. (g) Again partitioning the data, there will be no significant difference between the volunteer group scoring high and the volunteer group scoring low on clinical effectiveness in the mean rated depression change score of the caller.
2. (h) Repartitioning the data, there will be no significant difference between the lay volunteer group and the professional trainee group in the mean level of rated depression change score of the caller.
2. (i) There will be no significant relationship between the level of offered facilitative conditions and the level of self-exploration of the caller for the total sample of crisis workers.
2. (j) Again partitioning the data, there will be no significant difference between the volunteer group scoring high and the volunteer group scoring low on clinical effectiveness in the mean rated self-exploration score of the caller.
2. (k) Repartitioning the data, there will be no significant difference between the lay volunteer group and the professional trainee group in the mean level of self-exploration of the caller.

CHAPTER IV

ANALYSIS OF DATA

Rater Reliabilities for Facilitative Conditions

For the Accurate Empathy Scale, the reliability of all raters combined per segment was .83 for the Truax rating method and .82 for the Lister rating method as estimated by Ebel's (1951) formula for intraclass correlations (see Table 1).

The reliabilities of combined raters for the Nonpossessive Warmth Scale for Truax's rating method and Lister's rating method were .80 and .83, respectively.

For the Genuineness Scale, the reliability of all raters combined per segment was .78 for Truax's rating method and .82 for Lister's method of rating. Thus, there appeared to be moderate agreement between raters and the rating methods for each facilitative scale were thought to be reliable.

Rater Reliabilities for Outcome Measures

The reliability of combined raters per segment for the Anxiety Scale was .64 as estimated by Ebel's (1951) formula for intraclass correlation (see Table 1).

Table 1

Ebel intraclass correlations for
ratings of facilitative condition
scales and outcome measures

Method of Rating		
Scales		
Facilitative Conditions ^a	Truax	Lister
Empathy	.83	.82
Warmth	.80	.83
Genuineness	.78	.82
Outcome Scales ^b		
Anxiety	.64	
Depression	.69	
Self-exploration	.71	

^aNote--Each scale was rated by nine separate raters. There were 27 total raters rating facilitative conditions in this study.

^bNote--Each outcome scale had the same three raters rate each scale but at different times.

For the Self-Exploration measure, the Suchman Revealingness Scale, the reliability for all raters combined per segment was .71.

The reliability for combined raters per segment for the Depression Scale was .69. The outcome measures showed moderate agreement between raters and were considered to be reliable.

Similarity Between Truax and Lister Scales

Computations performed on the two methods of rating facilitative conditions suggested that they were measuring the same phenomena for each rating scale. The Pearson product-moment coefficient correlation computed between Truax's Accurate Empathy Scale and Lister's Empathic Understanding Scale exhibited a correlation of .95 (see Table 2). Similarly, high correlations were found between Truax's Nonpossessive Warmth Scale and Lister's Facilitative Warmth Scale (.91) and between Truax's Genuineness Scale and Lister's Facilitative Genuineness Scale (.93).

A high positive correlation was also found between Truax's Total Facilitative Conditions Score and Lister's Total Facilitative Conditions Score (.96). However, since both scores were additive measures of their three highly correlated and respective rating scales, they would be expected to be maximally correlated. It appeared that the constructs used by Truax and Lister, derived from the same clinical literature, were very

Table 2

Pearson product-moment coefficients of
correlation between facilitative conditions

Scales	Scales							
	1	2	3	4	5	6	7	8
1 Truax Empathy	---							
2 Truax Warmth	.58	---						
3 Truax Genuineness	.72	.58	---					
4 Truax Total Conditions	.88	.83	.88	---				
5 Lister Empathy	.95	.61	.71	.87	---			
6 Lister Warmth	.58	.91	.61	.81	.58	---		
7 Lister Genuineness	.72	.51	.93	.83	.71	.57	---	
8 Lister Total Conditions	.85	.80	.87	.96	.86	.85	.87	---

similar in the raters' minds. In part, this evidence offered a positive finding. Lister's rating method provides a more efficacious tool for use in training telephone therapists. Truax's rating method has been more heuristic and offers the opportunity to compare the results of the present investigation with past studies.

Correlations Between Facilitative Conditions

In several early studies using empathy, warmth and genuineness as central therapeutic ingredients, moderately high intercorrelations between the measures were obtained (Truax & Carkhuff, 1967). At times, it was suspected that a "good therapy relationship" dimension was being rated. However, other studies clearly indicated the functional independence of the three therapeutic conditions. In a group therapy study (Truax & Wargo, 1966) and in the John Hopkins study of individual therapy (Truax, Wargo, Frank, Imber, Battle, Hoehn-Saric, Nash & Stone, 1966), substantial negative correlations between the three therapeutic dimensions were obtained. Truax and Carkhuff (1967) postulated that empathy, warmth and genuineness constructs were functionally independent and varied with each particular therapist. However, Shapiro (1969) questioned whether analyses had been done which clearly supported either dependence or independence. Clearly, findings on this issue are equivocal.

Tables 2 and 3 offered evidence that the dimensions of empathy, warmth and genuineness as rated in this investigation

Table 3

Regression analysis with F ratios for the regressions of variable X on variable Y

		Variable							
	Variable	1	2	3	4	5	6	7	8
1	Truax Empathy	---	46.33	97.27	317.72	835.08	45.85	97.17	238.59
2	Truax Warmth		---	46.92	204.19	53.49	475.08	32.74	163.60
3	Truax Genuineness			---	332.05	96.03	54.48	630.26	280.60
4	Truax Total Conditions				---	291.07	173.97	208.31	929.79
5	Lister Empathy					---	46.04	93.89	272.19
6	Lister Warmth						---	43.79	235.64
7	Lister Genuineness							---	295.80
8	Lister Total Conditions								---

were moderately correlated and tended to contradict Truax and Carkhuff's hypothesis. Table 2 clearly indicates that all of the correlations between empathy, warmth and genuineness are significantly related ($p < .01$). In computing a regression analysis on the data (See Table 3), it was found that all of the scales were significantly correlated ($p < .001$). The three therapeutic ingredients were judged to fit a linear rule of prediction. Variables four and eight in Table 2 were artifacts, having been derived from additive scores of empathy, warmth and genuineness in the two rating methods. There did seem to be a global "helping" or "humanistic" dimension affecting the ratings, even though different raters judged each scale.

Hypotheses Tested

Hypothesis 1

There will be a significant difference in offered facilitative therapeutic conditions between lay volunteers and professional trainees (and crisis center professionals). The lay volunteer group will provide higher levels of conditions.

Table 4 presented the eight one-way analyses of variance and t tests computed between the criterion variables in this investigation. These analyses were performed at the University of Florida Computing Center.

1. (a) The null hypothesis of no difference between the two groups was rejected at the .10 level of significance¹ for ratings on the Truax Scale of Accurate Empathy. When a t test

¹Whenever the term "significant" or "significantly" was used, it referred to an alpha level of .10 unless specified otherwise.

Table 4

Analyses of variance and t tests using individual group variance (between) as best estimator of variance between professional trainee and lay volunteer groups on Truax's and Lister's empathy, warmth, genuineness and total conditions scores

Scale	Source of Variation	Sum of Squares	df	Mean Square	F ratio	t test
Truax Empathy	Between groups	55.48	1	55.48	2.24*	1.69*
	Within groups	2228.35	90	24.75		
Truax Warmth	Between groups	109.87	1	109.87	4.37**	2.42***
	Within groups	2261.60	90	25.12		
Truax Genuineness	Between groups	5.80	1	5.80	0.21	0.53
	Within groups	2418.63	90	28.87		
Truax Total Conditions	Between groups	0.56	1	0.56	2.39*	1.85**
	Within groups	21.33	90	0.23		
Lister Empathy	Between groups	1384.81	1	1384.81	1.14	1.14
	Within groups	109222.87	90	1213.58		
Lister Warmth	Between groups	4460.53	1	4460.53	2.30*	1.78**
	Within groups	173815.75	90	1931.28		
Lister Genuineness	Between groups	0.26	1	0.26	0.00	0.01
	Within groups	142454.87	90	1582.83		
Lister Total Conditions	Between groups	15.14	1	15.14	1.05	1.22
	Within groups	1296.88	90	14.40		

* $p < .10$.

** $p < .05$.

*** $p < .01$.

Note--The F ratios have df 1/90 and are two-tailed. The t tests are one-tailed.

of planned comparisons using the individual group variance (between) was used as the best estimator, there was also a significant difference at the .10 level of significance on the Truax Scale of Accurate Empathy. Although differences between the two groups were in the direction of demonstrating that the lay volunteers offered higher levels of empathy on the phone than the professional trainees on the Lister Scale of Empathic Understanding, the null hypothesis could not be rejected for Lister's scores. Neither an F test nor a t test for planned comparisons was significant at the .10 level for the two groups using Lister's empathy scores. There was, then, limited evidence that lay volunteers from the community were providing higher levels of accurate empathy on the telephone than were professional trainees or professionals in this sample.

1. (b) Significant differences were found between the two groups on both rating scales of warmth. The null hypothesis was rejected for both Truax's Warmth ratings and Lister's Facilitative Warmth ratings. The lay volunteers offered significantly greater levels of warmth to clients when on the telephone. An F test was significant at the .05 level of significance when analyzed for the Truax Warmth Scale. The t test for planned comparisons using the individual group variance (between) as the best estimator was significant at the .01 level of significance and indicated that the lay volunteers provided higher levels of

warmth to callers. The computed F test was significant at the .10 level of significance, and the t test for planned comparisons was significant at the .05 level for the Lister Facilitative Warmth Scale. Upon this evidence, the null hypothesis was rejected, the indication being that lay volunteers were providing clients with higher levels of warmth over the telephone than were professional trainees and professionals.

1. (c) The null hypothesis was not rejected for analyses of variance and t tests computed on Genuineness scores for the two groups. No significant differences were found nor were any major directional trends evidenced between the two groups when rated on levels of genuineness provided over the telephone.

1. (d) The composite Total Conditions Score was obtained for each telephone therapist on each rating method. While somewhat artifactual, significant differences were found between the lay volunteer and professional trainee groups on the Truax Total Conditions Score. An analysis of variance was significant at the .10 level of significance and a t test using the individual group variance was significant at the .05 level. The null hypothesis was rejected. Lay volunteers offered higher total therapeutic conditions over the phone when scored by the Truax method. However, this relationship did not hold for the Lister Total Conditions Score and the null hypothesis was retained. Neither the analysis of variance nor the t test using the

individual group variance as the best estimator was significant. However, once again, the mean score of the lay volunteer group was greater than the professional trainee group.

Interestingly, all the mean scores on each rated facilitative condition (empathy, warmth, genuineness, and total conditions offered) were higher for the lay volunteer group (see Table 5). This supported Carkhuff's (1968) contention that lay therapists are as high or higher on each of these rated scales than professional trainee products. The significant differences between the groups on several of these scales, and the fact that the lay volunteers did offer higher mean levels of facilitative conditions, suggested that the lay volunteer group was performing more therapeutically and effectively over the telephone.

Other minor evidence supporting this conclusion included the fact that when the data were divided into high, medium and low facilitative functioning groups (using Total Conditions Scores), a chi square test revealed that more professional trainees offered low levels of conditions than high levels on the Truax Total Conditions Score (see Table 6). This was significant at the .10 level of significance. However, no other groupings proved to be significant.

Hypothesis 2

Telephone therapists offering high levels of facilitative conditions will be significantly different than telephone therapists offering low levels of facilitative conditions on a wide variety of outcome measures. High functioning crisis workers will produce more successful client outcomes.

Table 5

Mean and standard deviations of professional trainee group and lay volunteer group on Truax and Lister facilitative scales

Scale	Group			
	Professional Trainee		Lay Volunteer	
	Mean	Standard Deviation	Mean	Standard Deviation
Truax Empathy ^a	2.42	0.47	2.61	0.58
Truax Warmth	2.88	0.41	3.18	0.60
Truax Genuineness	3.08	0.44	3.14	0.62
Truax Total Conditions	2.79	0.33	2.96	0.53
Lister Empathy	16.88	3.40	17.82	4.04
Lister ^b Warmth	21.23	3.54	22.93	5.33
Lister Genuineness ^b	23.96	3.66	23.97	4.69
Lister Total Conditions	20.68	2.64	21.57	4.17

^aThe Truax Empathy scale has been changed from a nine point into a five-point scale by multiplying each subject's mean score by a constant.

^bThe Lister Warmth and Lister Genuineness scales have been transformed into 38-point scales by multiplying each subject's scores on each respective scale by constants.

Note--The professional trainee group n= 27 and the lay volunteer group n= 65.

Table 6

Chi square test of correlation on frequency of professional trainees in high-medium-low ranks on Truax's and Lister's total conditions scores

	Ranks					
	Truax			Lister		
	High	Medium	Low	High	Medium	Low
Expected Frequency	9	9	9	9	9	9
Obtained Frequency	5	9	13*	7	10	10

* $p < .10$ level of significance. Obtained $\chi^2 = 3.33$, 1df.
Critical χ^2 for .10 level = 2.70.

2. (a) An investigation was undertaken to discover the relationship between the rated facilitative conditions scores and the TE rating previously scored on that phone call. A correlation matrix was computed at the University of Northern Illinois Computing Center. The strength of the relationship between one outcome measure of technical effectiveness and clinical effectiveness was tested. Only data on volunteers were used in this analysis because many individuals of the small sample of professional trainees were allowed to rate tapes for TE and may have biased the sample.

Table 7 presented evidence that specific calls rated for both clinical effectiveness (as judged by the Truax Total Conditions Score or the Lister Total Conditions Score) and previously rated technical effectiveness on that specific call were negatively correlated ($r = -.24$) for both Scores. In addition, each individual facilitative scale reflected a negative correlation with TE on that specific call. These correlations ranged from $-.15$ to $-.30$ regardless of the rating method. Both Warmth scales were significantly negatively correlated ($p < .10$) with specific TE. Evidence suggested that being facilitating to callers was not related to being technically proficient at handling that particular call.

2. (b) Comparisons between a mean score of technical effectiveness and clinical effectiveness were included in this

Table 7

Pearson product-moment coefficients of correlation
between facilitative conditions and Fowler's
Technical Effectiveness Scale (TE)

Scale	Scale	
	Technical Effectiveness	
Facilitative Conditions	Specific call	Mean TE rating of crisis worker
Truax Empathy	-.23	-.01
Truax Warmth	-.27 *	.09
Truax Genuineness	-.15	.02
Truax Total Conditions	-.24	.04
Lister Empathy	-.15	.03
Lister Warmth	-.30 *	.03
Lister Genuineness	-.15	.02
Lister Total Conditions	-.24	-.03

* $p < .10$.

Note--Specific call pairings done on $n = 34$ and the Mean TE rating of crisis worker pairings done on $n = 60$ subjects.

investigation. The mean TE score was derived from previous ratings of calls taken by the volunteer up to the time of sampling and was compared with the eight criterion variables of facilitative conditions. Table 7 indicated that no significant relationship existed between empathy, warmth, genuineness or total conditions scores and the outcome measure of mean TE scores. The correlations for the volunteers ranged from $-.01$ to $.09$. Evidence suggested that being facilitating to a caller was not related to the worker's general level of being technically proficient on the phone.

The null hypothesis was confirmed for 2 (a) and 2 (b). There was no relationship between CE and TE when the volunteer was rated on the same call, and this relationship approached significance in a negative direction. There was neither a positive nor a negative relationship between CE and the overall mean TE score of the volunteer.

A significant correlation ($r = .54$) existed between the rating of TE on a specific call and the volunteer's mean TE ratings on a number of his calls ($p < .001$). This minimally artifactual correlation suggested that the volunteer was fairly stable over time in his level of proficiency at handling calls. However, it only explained 28 percent of the variance and opened up several research questions regarding other variables affecting the technical effectiveness of the crisis worker.

2. (c) Another major outcome measure studied in this investigation was the rated anxiety level of the caller from the beginning to the end of the three-minute tape segment. These ratings on the total sample of 92 crisis workers produced a positive or negative change score for anxiety over the time period. A significant relationship between facilitative conditions and change scores of anxiety was discovered (See Table 8). The higher the level of empathy offered over the telephone, the greater was the decrease in the anxiety of the caller over time. This relationship was significant at the .01 level of significance ($r = .30$).

Similarly, significant positive relationships were found between high levels of warmth ($r = .30$), genuineness ($r = .29$) and total conditions scores ($r = .35$) and decrease in anxiety. This evidence displayed concrete proof of the link between offering therapeutic conditions and their effect at producing successful client outcomes in crisis centers.

2. (d) The data were partitioned. This procedure investigated further which crisis workers contributed to the above mentioned relationship in hypothesis 2 (c). It also investigated which type of volunteer within the volunteer crisis worker group contributed to the strength of the relationship between facilitative conditions and decreases in anxiety. An analysis of variance for equal Ns found significant differences between groups of volunteers rated high on clinical

Table 8

Pearson product-moment coefficients of correlation between rated mean change score of anxiety levels in the caller and offered facilitative conditions

Scale	
Facilitative Conditions Scales	Anxiety Change
Truax Empathy	.30**
Truax Warmth	.30**
Truax Genuineness	.29**
Truax Total Conditions	.35**

** p < .01 level of significance. The number of subjects in this analysis equalled 92.

Table 9

Analysis of variance comparing High CE Volunteer
and Low CE Volunteer groups on rated mean change
scores of anxiety levels in the caller

Measure				
Source of Variation	Sum of Squares	df	Mean Square	F ratio
<u>Between groups</u>	5.82	1	5.82	4.81 ^{**}
<u>Within groups</u>	46.00	38	1.21	

^{**} $p < .01$.

Note--High CE Volunteer mean= 2.16 and the Low CE
Volunteer mean= 1.40.

effectiveness and low-rated CE volunteers (see Table 9). Volunteers who were rated high on clinical effectiveness (mean level of positive anxiety change= 2.16) were significantly more effective in decreasing the anxiety of the caller than the low clinically effective volunteers (mean level of positive anxiety change= 1.40). This finding was significant between groups ($F= 4.81, 38 \text{ df}, p < .05$) and offered evidence for the differential functioning of crisis workers during crisis situations. It also suggested that the high-rated CE volunteers and not the medium- or low-rated CE volunteers were responsible for the positive relationship between facilitative conditions and decreases in anxiety.

2. (e) The data were repartitioned. This tested what influence the lay volunteer and professional trainee groups contributed to the relationship between facilitative conditions and decreases in anxiety. It also tested the differential effects that the variable of professionalism had on outcome measures. An analysis of variance for unequal N s tested the hypothesis that there was no significant difference between the professional trainee group (mean level of positive anxiety change= 1.77) and the lay volunteer group (mean level of positive anxiety change= 1.72). No significant difference was found between groups ($F= 1.06, 90 \text{ df}, \text{n.s.}$). Apparently, the level of training

Table 10

Analysis of variance comparing professional trainee
and lay volunteer groups on rated mean change scores
of anxiety levels in the caller

Measure				
Source of Variation	Sum of Squares	df	Mean Square	F ratio
<u>Between groups</u>	.05	1	.05	0.04
<u>Within groups</u>	96.22	90	1.06	

Note--The professional trainee group mean= 1.77 and the
lay volunteer group mean= 1.72.

of the crisis worker made no difference in the callers' expression of anxiety over time. These results also suggested that neither group unduly influenced the relationship between facilitative conditions and anxiety change scores.

2. (f) Another outcome measure reflecting the affective state of the caller on the initial phone call was investigated. The rated depression level of the caller from the beginning to the end of the three-minute tape segment was studied for the total sample of crisis workers. A positive or negative change score for depression over the time period was produced. As was discovered for ratings of anxiety, a significant relationship between facilitative conditions and change scores of depression was found (see Table 11). The higher the level of empathy offered over the telephone, the greater the decrease in the level of depression expressed by the caller. This relationship was significant at the .01 level of significance ($r = .31$).

In addition, positive relationships were found between high levels of warmth ($r = .37$), genuineness ($r = .25$) and total offered conditions ($r = .36$) and rated decrease of depression over the time period. All of these correlations were significant at the .01 level of significance, with the exception of the relationship between genuineness and depression change scores which was significant at the .02 level of significance.

Table 11

Pearson product-moment coefficients of correlation
between rated mean change scores of depression levels
in the caller and offered facilitative conditions

Scale	
Facilitative Conditions Scales	Depression Change
Truax Empathy	.31 **
Truax Warmth	.37 **
Truax Genuineness	.25 *
Truax Total Conditions	.36 **

* $p < .02$.

** $p < .01$.

Note--The number of subjects in this analysis
equalled 92.

2. (g) The data were again partitioned. This investigated what types of crisis workers decreased depression levels in callers. It also tested whether the high-, medium- or low-rated CE volunteer contributed to the relationship between facilitative conditions and decreases in depression. It was hypothesized that volunteers functioning at high levels on clinical effectiveness would have no more successful change scores on rated depression than would those volunteers functioning at low levels of clinical effectiveness. The sample of lay volunteers was divided into two groups based on high and low scores on Truax's Total Conditions measure. When they were compared on change scores of rated depression over time, it was found that the group of volunteers scoring high on CE had significantly greater change scores on rated caller depression (see Table 12). An analysis of variance for equal Ns proved significant at the .05 level of significance ($F = 6.38$, 38 df, $p < .05$). The high CE group had change scores of caller depression (mean change score = 2.14) greater than the low CE volunteer group (mean change score = 1.36). This result rejected the null hypothesis of no differences between volunteer groups on outcome measures, and suggested that high levels of functioning do influence outcome measures in crisis centers. It also suggested that it was the high CE volunteer group rather than the medium or low CE group that contributed to this relationship.

Table 12

Analysis of variance comparing High CE Volunteer and Low CE Volunteer groups on rated mean change scores of depression levels in the caller

Measure				
Source of Variation	Sum of Squares	df	Mean Square	F ratio
<u>Between groups</u>	6.09	1	6.09	6.38 **
<u>Within groups</u>	36.28	38	0.95	

** $p < .01$.

Note--High CE Volunteer group mean= 2.14 and the Low CE Volunteer group mean= 1.36.

2. (h) Further partitioning within the total crisis worker sample tested the relationship between facilitative conditions and caller depression levels. It also tested the effect of the variable of professionalism on this relationship. It was hypothesized that there would be no significant difference between the lay volunteer group and the professional trainee group in change scores of rated caller depression over time. This hypothesis was retained. No difference was found between groups when an analysis of variance for unequal Ns was computed (See Table 13). The lay volunteer group (mean change score= 1.65) and the professional trainee group (mean change score= 1.62) were essentially similar on this outcome measure. It appeared that the variable of level of training of the crisis worker had no effect on the rated state of depression in the caller. This evidence suggested that both experimental groups of crisis workers contributed equally to the positive relationship between facilitative conditions and depression levels.

2. (i) The final outcome measure studied in this investigation was the level of self-exploration of the caller on the three-minute tape segment. Data were compiled for the total sample of 92 crisis workers. Hypothesis 2 (i) postulated that no relationship between levels of facilitative conditions offered by the helper and the level of self-exploration of the helpee existed. This hypothesis was not confirmed. A

Table 13

Analysis of variance comparing professional trainee
and lay volunteer groups on rated mean change scores
of depression levels in the caller

Measure				
Source of Variation	Sum of Squares	df	Mean Square	F ratio
<u>Between groups</u>	.02	1	.02	0.02
<u>Within groups</u>	78.56	90	.87	

Note--The professional trainee group mean= 1.62 and
the lay volunteer group mean= 1.65.

significant relationship was found between the level of offered empathy on the phone and the amount of self-exploration attempted by the caller (see Table 14). Crisis workers in this sample who offered high levels of empathy had clients who explored themselves to a greater extent than did crisis workers offering low levels of empathy ($r = .39$). This finding was significant at the .01 level of significance.

Similarly, other Pearson product-moment coefficients of correlation were significant in a positive direction between high levels of offered warmth ($r = .28$) and high levels of total conditions offered ($r = .28$) and high levels of client self-exploration. These relationships would be expected by chance only once in one hundred statistical analyses.

In this sample of crisis workers, it was found that high levels of offered genuineness were significantly associated with low levels of client self-exploration. The Pearson product-moment coefficient of correlation between genuineness and self-exploration was negative ($r = -.40$) and this relationship was significant at the .01 level of significance.

Except for this negative finding, facilitative conditions were positively associated with levels of self-exploration. Callers who disclosed their feelings and problems to a high degree interacted with crisis workers who were perceived by raters as offering high levels of empathy, warmth and total conditions to the distressed caller.

Table 14

Pearson product-moment coefficients of correlation
between rated level of caller self-exploration and
offered facilitative conditions

Scale	
Facilitative Conditions Scales	Self-exploration Level
Truax Empathy	.39**
Truax Warmth	.28**
Truax Genuineness	-.40**
Truax Total Conditions	.28**

** p < .01 level of significance. The number of subjects
in this analysis equalled 92.

2. (j) The data were partitioned. An investigation determined which crisis workers in the volunteer group contributed the most influence to the above mentioned positive relationship. It was hypothesized that volunteers functioning at high levels of clinical effectiveness would not create deeper levels of self-exploration in callers than would minimally clinically effective volunteers. The sample of lay volunteers was analyzed by dividing them into the group of 20 volunteers scoring highest on Truax's Total Conditions scores and the group of 20 volunteers scoring lowest. When they were compared on the mean levels of the rated self-exploration of their callers for the three-minute tape segment, it was found that the highly functioning CE volunteer group had callers who more deeply explored themselves (mean level of self-exploration= 3.19) than the low functioning CE volunteer group (mean level of self-exploration= 2.23). An analysis of variance for equal Ns (see Table 15) demonstrated that the high clinically effective group of volunteers was significantly different for levels of client self-exploration ($F= 5.39$, 38 df, $p < .05$). On the basis of this result, the null hypothesis of no differences was rejected and again pointed out the differential functioning of crisis workers and their effect on successful outcomes in crisis center activity. The results suggested that the high-rated, not the medium- or low-rated group of volunteers was contributing to the relationship between facilitative conditions and client self-exploration.

Table 15

Analysis of variance comparing High CE Volunteer
and Low CE Volunteer groups on rated level of
self-exploration of the caller

Measure				
Source of Variation	Sum of Squares	df	Mean Square	F ratio
<u>Between groups</u>	3.18	1	3.18	5.39**
<u>Within groups</u>	22.45	38	0.59	

**
p<.01 level of significance.

Note--High CE Volunteer group mean= 3.19 and the
Low CE Volunteer group mean= 2.23.

2. (k) The data were repartitioned. This procedure investigated which crisis workers in the total sample contributed to the relationship between facilitative conditions and client self-exploration. It also investigated the effect of the variable of professionalism on the outcome measure of client self-exploration. The final hypothesis in this investigation postulated that no difference would be found between the professional trainee group and the lay volunteer group when tested on their respective levels of client self-exploration. This null hypothesis was rejected at the .10 level of significance when an analysis of variance ($F = 2.89$, 38 df, $p < .10$) was computed (See Table 16). It was found that the lay volunteer group had clients who explored themselves to a greater extent (mean rated level of self-exploration = 3.16) than did the clients of the professional trainee group (mean rated level of self-exploration = 2.82). While not highly significant, this finding was suggestive. This evidence indicated that the lay volunteer group contributed most of the strength to the relationship between facilitative conditions and client self-exploration. It suggested that the variable of professionalism adversely affected the effectiveness of the crisis worker and inhibited the caller from fully disclosing himself.

A secondary analysis of the data was performed to discover the relationship between affective states and self-exploration over the telephone (see Table 17). Rated levels of anxiety

Table 16

Analysis of variance comparing professional trainee
and lay volunteer groups on rated level of self-
exploration of the caller

Measure				
Source of Variation	Sum of Squares	df	Mean Square	F ratio
<u>Between groups</u>	2.09	1	2.09	2.89*
<u>Within groups</u>	65.33	90	0.72	

* $p < .10$ level of significance.

Note--The professional trainee group mean= 2.82 and
the lay volunteer group mean= 3.15.

Table 17

Pearson product-moment coefficients of correlation
between rated change scores of affective states
and rated level of self-exploration of the caller

Measures			
Measures	Anxiety Change Scores	Depression Change Scores	Self-exploration Levels
Anxiety Change Scores		.42 **	.44 **
Depression Change Scores			.39 **
Self-exploration Levels			

**
p < .01 level of significance. The number of subjects
in this analysis per comparison equalled 92.

change were significantly related to the level of rated self-exploration of the caller ($r = .44$, $p < .01$). In addition, it was also found that rated levels of depression change were significantly related to the level of rated self-exploration of the caller ($r = .39$, $p < .01$). This finding occurred regardless of the level of training of the worker. When the caller talked about himself and his problems, his feelings began to stabilize. He became less anxious and depressed.

Another secondary analysis found that the rated level of anxiety change and the rated level of depression change were minimally related ($r = .42$). This finding suggested that changes in affective states occurred in somewhat the same time sequence. However, enough variance was unaccounted for to suggest that certain affective states resist change more than others and respond to different variables. After listening to all of the tape segments several times while they were being rated, the investigator had the impression that depressive affective states were less subject to change than anxiety. Callers seemed to be able to quiet their anxiety quickly with certain types of crisis workers on the phone.

CHAPTER V

DISCUSSION

Facilitative Conditions

The data and data analyses presented in the RESULTS section led to several interesting conclusions. The results pointed to a negative relationship between professional experience and facilitative conditions. Lay volunteers from the community were perceived by raters as offering higher levels of therapeutic conditions than professional trainees and professionals. This relationship was especially significant for the variable of offered warmth. No significant difference was found for ratings of genuineness between the two groups. It was interesting that the lay volunteer group was rated as high or higher on the mean level of each offered facilitative condition than the professional trainee group. These findings supported Carkhuff's (1968) contention that untrained personnel are more therapeutic than professional caretakers.

Bergin (1963) and Berenson and Carkhuff (1967) have discussed the implications of psychotherapy studies which have shown the efficacy of personal rather than professional variables as predictors of therapeutic influence. The present investigation is further evidence that untrained persons from the community can

be as therapeutic (if not more therapeutic) as trained personnel. The results once again question what professional training programs in the helping professions are teaching their students to be; professional or therapeutic? Findings also suggest that empathy, warmth and genuineness may be personality attitudes with which people from the community who volunteer to work in crisis centers are heavily endowed. Using the non-professional in therapeutic roles offers viable solutions to the tremendous manpower shortage in the mental health profession.

It is noteworthy that the present investigation is the first one to study and offer evidence of high functioning community volunteers in suicide and crisis intervention services. It has been discovered (Marcus, 1970; Zelenka, 1971) that the primary therapeutic functions in crisis services are either continuing face-to-face client contact with the crisis service or offering therapy directly over the telephone. This conclusion suggests the potent significance of the telephone and the crisis worker as important therapeutic resources. The implications of these findings are clear. Crisis centers need not rely solely or even predominantly on professional trainees and professional staff members to handle this rapidly expanding service of providing therapeutic conditions to callers. More and more therapeutic activity can be channeled to the community volunteer who uses the telephone as a helping agent.

Finding the Truax and Lister empathy, warmth and genuineness scales to be reliable instruments offers crisis centers a series of tools with which to select, train and assess their crisis workers. In addition, because of the bulk of research performed on Truax's scales, these offer the crisis center a viable research instrument to investigate their workers' clinical performance on a number of untested variables. This is especially relevant since tape recordings are the most efficient source of data for crisis centers to maintain.

One methodological question was raised by Rosenblum (1970). He asked whether the use of a single interview to rate levels of conditions accurately measured the variability of therapists for different clients. However, a series of studies demonstrated that the therapist was fairly stable in the level of conditions he offered over time (Truax et al., 1966). Truax (1962) also found that therapists were not significantly different on levels of offered empathy and genuineness over time but were different for levels of offered warmth. After reviewing the numerous studies on facilitative conditions, Truax and Mitchell (1971) concluded that:

the evidence is both uniform and strong in indicating that it is the interviewer, not the patient, who determines what the level of... empathy and genuineness will be and...that the patient has little to do with the level of warmth offered by the therapist.

They concluded that the offered conditions of empathy, warmth and genuineness were relatively permanent personality attitudes of the therapist as well as specific interpersonal skills of certain untrained or trained individuals.

Another methodological problem in reviewing or generalizing from research on variables such as empathy, warmth and genuineness occurs when various rating scales and methods have been used to obtain scores. In addition, several authors reported questioning the theoretical meaning of the scales and presented some evidence that the empathy scale did not measure that construct (Chinsky & Rappaport, 1970). Shapiro (1969) also doubted the validity of the warmth and genuineness constructs on theoretical grounds. However, Truax (1967) has argued convincingly that whatever the ratings of the scales measured, they were significantly related to positive outcomes in a variety of patient and therapist samples. Belanger (1972) in an excellent review of research in psychotherapy and counseling employing the therapeutic conditions, noted that approximately 97 percent of all outcome measures used in 42 studies reported from 1961 to the present had been significantly related to ratings of empathy, warmth and genuineness. These studies also had a median interrater reliability of .72 (Truax & Mitchell, 1971). None of the many rating methods, the patient variables, the subject populations, or the theoretical orientations of therapists seemed to appreciably change the persistent relationship between ratings and outcome.

The present investigation is the first study to find untrained nonprofessionals to be highly facilitating and therapeutic in a crisis center situation. Finding that the facilitative conditions were significantly linked to successful client outcomes in crisis center activity and finding that high-functioning lay volunteers had more successful outcomes has contributed provocative data to further research in crisis centers. The many research findings in psychotherapy and counseling research may now be extended to relationships among variables in crisis centers. The whole question of using only professionals to staff telephone crisis services has been questioned by the findings in this investigation.

Outcome Measures

Finding significant differences between crisis worker groups on facilitative conditions proved suggestive. From the extensive research on facilitative conditions, there have been numerous findings linking the conditions to successful outcomes in psychotherapy and counseling interactions. It was expected that each facilitative condition would be related to a variety of crisis center outcomes in this investigation. To find these important links would provide valuable evidence for the efficacy of using therapeutic conditions as assessment, selection and training variables. Results indicating no significant relationships between facilitative conditions and outcomes could suggest

that facilitative conditions were not therapeutic agents or, on the other hand, that the outcome measures were inappropriate. Rogers (1951) noted that a great variety of outcomes measuring therapeutic change need to be attempted and frequently research designs are dismissed when poor outcome measures are at fault. Research on outcomes in crisis centers has been a totally neglected area of investigation. Many centers have offered face validity as a justification for their existence. This investigation attempted to provide a preliminary outcome design for crisis center research. However, due to the complex nature of designing outcomes, the results of this investigation remain open to question. The conclusion of Part II of this study was felt justified if it proved heuristic to future research on crisis centers and crisis workers. It will remain necessary for crisis centers to define and to decide upon those outcome measures most important for them. They may then begin to increase their clinical and agency effectiveness.

An investigation of Hypotheses 2 (a) and 2 (b) presented evidence that being facilitating to a caller was not related to either the volunteer workers' (1) general rated technical effectiveness level or the (2) specific rated technical effectiveness level on that call. Neither was empathy, warmth, genuineness nor clinical effectiveness (Truax's Total Conditions Score) necessarily associated with the technical efficiency of the volunteer. In fact, most

correlations between facilitative conditions and TE were negative. It was found that volunteers offering high levels of warmth were significantly less technically proficient on the specific call. These findings were the opposite of Ansel's (1972) recent finding that TE and Lister's genuineness scores were highly correlated in a positive direction ($r = .89$) when analyzed on a call-for-call basis. Ansel's study was done after the present investigation had been completed. It was unclear why Ansel used only the one facilitative condition to rate calls and in what way this rating would be related to the technical effectiveness of the crisis worker.

Although no research had been provided in the literature on TE and personality characteristics, it seems reasonable to hypothesize that TE would be related to attitudes of compulsivity, rigidity and other anxiety-reducing mechanisms of the worker. The TE Scale is a series of seven or nine questions. As such, it represents a type of behaviors that is learned (perhaps learned quite easily under directed training). This set of behaviors can be consciously brought into play by the crisis worker during stress situations. To be able to be directive and to ask structured questions during a crisis call can relieve anxiety on the worker's part. This investigation found that low CE scores are somewhat related to high TE scores. Belanger's research (1972) discovered that low CE volunteers were endorsing items reflecting rigidity, inflexibility and instability.

Assuming that these personality characteristics reflect anxiety-reducing behavior patterns, the present investigation seems to substantiate this impression. Perhaps the TE Scale measures anxiety-reducing phenomena. On the other hand, a CE measure, which is derived from the literature on facilitative conditions and client-centered psychotherapy, reflects a more loosely organized personality attitude system. The high CE worker is more concerned with the feelings of the person and is less directive when offering high conditions. The high CE worker is listening rather than seeking great amounts of factual information (by asking questions) from the caller. Therefore, it seems feasible that CE and TE would be unrelated or negatively related dimensions. However, for efficient crisis center functioning, workers would be valued if they were high on both facilitative conditions and technical effectiveness.

A test of hypothesis 2 (c) was performed to discover the relationship between facilitative conditions and rate anxiety change in the caller. It was found that the higher the level of empathy, warmth, genuineness or total conditions offered to the caller, the more the caller became calm and less anxious. These relationships were highly significant and provided definite evidence of the link between offered therapeutic conditions and successful outcomes in crisis centers. Lessening the anxiety within the caller is a very real and desired outcome in crisis center activity. Many times it is the primary reason that the client calls. Since so many calls to crisis centers are the direct result of disturbed affective states on the part of the

caller, this finding implies that crisis centers can help. Providing the variables that differentially contribute to this helping process is a significant finding. These data again represent encouraging evidence that facilitative conditions are a primary variable in telephone therapy situations. The avenues this finding opens up to crisis centers are obvious.

Hypothesis 2 (d) postulated that there would be no difference in change scores of caller anxiety between groups of high and low clinically effective lay volunteers. It was found that the group of high-rated clinically effective volunteers had clients whose anxiety levels changed significantly more in a positive direction than low-functioning volunteers. This differential finding of lessened anxiety levels during the telephone interaction provided additional evidence that crisis workers may be dissimilar in their levels of effectiveness and their abilities to create constructive client outcomes. Since facilitative condition scores are significantly correlated to anxiety change scores, this finding is expected. This result provided crisis centers with evidence that untrained volunteers can be clinically effective and can significantly change a caller's affective condition. Finding high CE volunteers to be more effective at instituting changed affective states in clients suggests that crisis centers need to screen and assess their volunteers more thoroughly to provide optimum service.

A test of hypothesis 2 (e) found no significant difference between lay volunteer and professional trainee groups with respect to anxiety change scores in clients over time. The variable of experience in training had no effect on the caller's state of anxiety. Apparently, the caller is more attuned to other conditions being offered over the telephone which may calm him. The data again pointed to the fact that there were both high and low facilitating untrained volunteers and professional trainees in this investigation. The facilitative crisis workers were those who created significant changes in the caller's condition by talking to him therapeutically over the phone.

The finding from the test of hypothesis 2 (f) provided additional proof for the efficacy of supplying empathy, warmth and genuineness variables over the telephone to callers. It was found that offering high levels of facilitative conditions to the caller diminished his feeling of depression significantly. These results again had several clear implications. First, rating the affective state of the caller and investigating changes over time in the depression level of the caller is a viable outcome measure. As with the use of anxiety levels as an outcome measure, depression is a common affective state that often motivated callers to contact the SCIS. Often this was the only stated problem which the caller could offer. In changing this affective state, a successful intervention can be considered to

have occurred. Certainly this is not the only goal of the crisis center. But relieving the affective distress of the caller is often a valuable goal in itself.

Discovering that the facilitative conditions offered to the caller have an effect on his emotional states provides a positive finding for crisis centers. The ratings of empathy, warmth and genuineness are relatively easy to accomplish in most centers. Finding that these conditions are linked to positive outcomes provides the crisis center with at least some justification for its activities. Given enough links between facilitative conditions and positive outcomes, the crisis center can begin to conduct its own ongoing investigations into its impact on the community.

The evidence from the test of hypothesis 2 (g) again indicated that there are differential levels of functioning in crisis workers. The lay volunteers scoring high on measures of clinical effectiveness exhibited greater positive change scores on rated depression levels of callers. This finding had two implications. First, crisis workers can be identified as being high-or low-functioning helpers. This result leads to the conclusion that crisis centers can begin to select, assess and train workers with the criterion variables used in this investigation. Secondly, facilitative conditions were again tied to a positive outcome measure in crisis center activity. This result

strengthened the conclusion that crisis centers do engage in constructive outcomes with callers. These outcomes are measurable and quantifiable. Rated change scores of caller depression provide a realistic outcome measure for crisis centers. It must be emphasized again that changes in callers' affective states which occur in a positive direction are greatly sought-after goals of crisis centers. Whether the client finds this level of outcome measure beneficial is a concern for future investigations.

A test of hypothesis 2 (h) reconfirmed the impression that the level of training of the crisis worker had no effect on the affective state of the caller. It was found that no significant difference existed between lay volunteer and professional trainee groups for change scores of rated caller depression over time. A highly distressed and depressed caller seemed to select other potent variables from the communication with the crisis worker. These appeared to center around the level of facilitative conditions that were offered to him. Given high levels of these conditions, the caller became less depressed and began to energize and mobilize himself. Training in the helping professions does not in itself seem to affect levels of depression in a caller. No significant changes in the level of client depression reflect any of the clinical training obtained in the years of graduate school preparation or on-the-job clinical experience of professional workers.

Hypothesis 2 (i) tested the level of self-exploration of the caller on the three-minute tape segment. The level of self-exploration on the part of the client was thus used in this investigation as an outcome measure. Truax and Carkhuff (1967) discussed clients who were most likely to improve in psychotherapy. A primary characteristic of these clients was that they engaged in deep and extensive self-exploration. This led to significant changes on personality and behavioral measures. They postulated that self-exploration is the client correlate associated with high levels of therapist-offered facilitative conditions. Several studies had suggested that levels of therapist-offered therapeutic conditions were causally linked to levels of self-exploration in the patient (Truax & Carkhuff, 1964; Tomlinson, 1962; Wagstaff, Rice & Butler, 1960). Many investigations reviewed by Truax and Carkhuff found that successful therapy clients were described as exploring their problems and themselves to a higher degree. In specific subanalyses, Truax and Carkhuff found that the basal, not the highest, level of self-exploration was the measure most highly related to outcome. The positive relationship between the level of self-exploration and several outcomes held whether the measurement of self-exploration was taken early or late in the process of therapy. Rogers and Truax (1962) found a correlation of .70 between level of self-exploration in the second interview and final case outcome. However, investigations on the relationship between facilitative conditions and outcomes in crisis center activities have been lacking.

It was found in the present investigation that levels of offered therapeutic conditions were generally significantly related to high levels of client self-exploration on the telephone. Crisis workers who offered high levels of empathy, warmth and total conditions to callers had these clients engaging in deeper levels of self-disclosure. This finding was the first comprehensive result in crisis center research indicating that facilitative conditions were also linked to the positive outcome of self-exploration in a crisis situation. This again reinforced the implication that crisis centers have at their disposal tools that are therapeutically effective and that can be used to create more highly functioning workers. Since the telephone is used with such frequency to deliver therapeutic services to the community, finding that facilitative conditions were causally linked to positive outcomes in the crisis center setting was a very important result.

It was found in the present investigation that the level of rated genuineness was negatively related to the level of self-exploration on the part of the caller. Interestingly, Rogers and Truax (1962) found that therapist genuineness was the facilitative condition which was the least related to client levels of self-exploration in psychotherapy. Truax reanalyzed the data from a 1962 study and demonstrated that the patient plays the major role in determining his own level of self-exploration. However, therapists did influence the levels of patient self-

exploration by offering certain levels of facilitative conditions. Evidence in the present investigation suggested that crisis workers who appeared to be the most genuine or authentic may have threatened the caller and thus diminished his level of self-disclosure. Perhaps in this sample, the caller is more comfortable in disclosing to a more distant worker with a professional attitude on the telephone. It is possible that the visual cue of seeing the helper is an aid in conveying levels of offered genuineness in an unthreatening manner. This finding does provide a note of caution in generalizing about all of the facilitative conditions and their effects on clients. The facilitative conditions do not explain all of the variance in successful case outcome or differences in client behavior. Nor do the three variables always react in a parallel manner in investigations. Discovering the variables that contribute to other variations in successful and unsuccessful client outcomes remains to be investigated. This is particularly true of client behaviors being investigated in crisis centers.

Hypothesis 2 (j) tested the null hypothesis of no differences between high- and low-functioning volunteer groups when compared on outcome measures. It was found that lay volunteers exhibiting a high level of clinical effectiveness also had a significantly greater amount of self-exploration on the part of their telephone clients. This result suggested that differential

effects can be attributed to the crisis worker in his activities while providing therapeutic services to distressed clients. The level of self-exploration proved to be another efficacious outcome measure in this investigation. From the face validity and the results of previous investigations, client self-exploration is a valuable goal of crisis center activity. This is especially true since crisis centers are using the telephone as a major therapeutic medium. Discovering the link between effective crisis workers and another outcome measure only points out the necessity of having crisis centers begin looking at levels of facilitative conditions as potent variables to use for assessing, training and selecting their workers. Using the total conditions score appeared to provide a discriminating method of predicting workers who can contribute successful outcomes in crisis centers.

The final test of an outcome variable centered around the study of hypothesis 2 (k). It was predicted that no difference would be found between groups of lay volunteers and professional trainees in their clients' levels of self-exploration. However, the clients of the lay volunteer group showed significantly greater levels of self-exploration than those of the professional trainees. Once again, differential effects suggested that the level of training was hindering crisis workers. This finding implies that training programs in the helping professions are not training their students to be clinically effective. Crisis centers who only employ professionals who have been trained to high levels of expertise in

graduate programs need to reevaluate their procedure of manpower selection. In crisis centers, there is no need for the housewife, student, businessman, tradesman, secretary or any other crisis worker to consider himself less skilled than the professional at providing help over the telephone. The evidence in this investigation is very clear. The lay person who volunteers from the community to try to help distressed callers over the telephone is functioning at a very high level. In addition, on several outcome measures, these workers are providing more positive successes in terms of helping the caller, are offering higher levels of therapeutic conditions, and are becoming the mainstay of therapeutic activity in crisis centers.

Rating Methodology

The raters who rated facilitative conditions in this investigation were naive both with respect to theory and with respect to the measurement of other variables involved in the study. Also, the ratings were done by raters who were not sophisticated in crisis center theory, research and practice. They were naive college students who had little if any prior knowledge of telephone therapy and were unacquainted with any of the crisis workers they were rating. Just as importantly, they were trained on only one scale. Thus, there was no likely contamination due to the theoretical expectations of the raters.

The Lister rating scales were employed in addition to the Truax scales to find a more efficient training method for use in

crisis centers. A measurement tool which was concise, understandable, differentiated and took a short time to learn was deemed urgently necessary because of the volume of nonprofessional volunteers being screened and trained by crisis centers. It became a question of practicality versus loss of rigor in this research design. If the investigation can be criticized, the use of two rating methods represents this research design's most salient methodological problem. However, in the best interests of finding a reliable and efficient tool, the Lister method of rating empathy, warmth and genuineness was included in this design. Because of the high correlation between each rating method on each facilitative scale, the Lister scales appear to be an efficient screening, training and assessment tool and can be easily adapted by crisis centers for future use.

As has been pointed out, several similar types of criticism have also been leveled against Truax, Carkhuff and others for using differing rating methods, training methods, rating scales and for using taped ratings of short duration as primary data. Truax succinctly pointed out that regardless of the rating measures used, the methods employed or even the validity of the facilitative conditions scales, the research stands or falls on the ability of the data to predict successful client outcomes.

The results of this investigation offered proof that both ratings on Lister's and Truax's scales predicted successful outcomes. And since the facilitative conditions scales consistently

have predicted both individual and group psychotherapy outcomes on a variety of indices, this investigator felt comfortable in using two different rating methods to rate empathy, warmth and genuineness. It is necessary to point out that any significant findings related to facilitative conditions and outcomes in this investigation can only be generalized to other research designs using the same methodology.

Experience

The controlled variable of experience in training was the main variable being studied in this research design. However, it was questioned whether the two experimental groups (professional trainees and lay volunteers) had different experiences on the telephone which could contaminate ratings of offered facilitative conditions. The uncontrolled variable of experience on the telephone was studied by tabulating the number of phone calls taken by a worker up to the date for which the worker's call was taped for this investigation.

Because taped data was obtained early in the center's history (during its first year), there was no significant difference in the number of calls taken ($t = 0.73$) for the two experimental groups. The mean number of calls taken by the volunteer group was 2.62 while the mean number of calls taken by the professional trainee group was 2.35. Later in the center's existence, differences became evident between the two groups.

Volunteers appeared to take over more and more of the telephone work while trainees moved into training, research and other specialized activities. The speculation that the professional trainee group was selecting itself out of telephone work because it was less clinically effective requires additional research to verify.

Since two volunteer workers did take an unusually high number of calls (10) in the time period from which the experience on the phone data was sampled, correlations were computed between the number of calls taken up to the time of sampling and offered levels of empathy, warmth and genuineness for all subjects. The results showed only minimal relationships between these variables (see Table 18). Also, these two workers were functioning low on each therapeutic variable despite excessive telephone contact with people.

One problem which confounded controls for experience on the telephone was that for various reasons not all of a worker's calls were taped. For example, the tape ran out on the recorder, the crisis worker did not want to be taped and never turned on the recorder, the call came in on a phone line which was not hooked up to the recording system, etc. In addition, without listening to and rating all calls ever taped for a crisis worker, it was impossible to determine how many calls were received that were of high enough crisis intensity that the worker was able to

Table 18

Pearson product-moment coefficients of correlation
between experience on the phone and levels of offered
facilitative conditions

Measure	
Scale	Experience on the Phone
Truax Empathy	.05
Truax Warmth	-.03
Truax Genuineness	-.02
Lister Empathy	.03
Lister Warmth	-.05
Lister Genuineness	-.01

experience and give maximum levels of empathy, warmth and genuineness to the caller. The total experiences of a worker in the center included receiving many calls that only involved routine information-giving activities such as offering vocational assistance, giving research advice to students, handling prank calls or receiving short hang-up calls.

Another confounding problem was that during the time of this investigation only initial phone calls were taped on crisis cases. Any subsequent calls from or to the same individual in crisis could be looked upon as added experience on the phone and as a variable affecting the outcome of the case. But no adequate way was available to determine the frequency or content of all the calls for each worker. With these limitations, the level of experience on the telephone in the crisis center could only be roughly estimated for the two groups of crisis workers.

Since the phone calls used in this investigation were collected from the center's tapes during its first few months of operation, it is improbable that many crisis workers could have gained much experience over the phone. It is also questionable whether any worker could have increased his level of therapeutic functioning and effectiveness without directed feedback. At the time of sampling, no procedure in the center was available to provide specific feedback on the worker's performance.

Previous research shows little or no evidence of any gains in offered therapeutic levels of empathy, warmth or genuineness without directed training using these variables (Reddy, 1969). Experience on the telephone seemed not to be a potent variable affecting the two experimental groups.

CHAPTER VI

SUMMARY

This study investigated the relationships between the types of professional training of crisis workers and the levels of facilitative therapeutic conditions (empathy, warmth and genuineness) offered by these crisis workers. Also investigated were the differential effects of the variables of professionalism, levels of clinical effectiveness and levels of facilitative conditions on a variety of crisis center outcome criteria. The relationships and effects were tested using telephone crisis calls in a suicide prevention and crisis intervention center. An attempt was also made to test the efficacy of the Lister facilitative conditions rating scales for adaptation as selection, training and assessment tools for crisis centers. Finally, a preliminary research paradigm for outcome research in crisis centers was attempted.

All crisis workers in this investigation were evaluated in terms of their ability to offer empathic understanding, non-possessive warmth, authentic genuineness and these summed total conditions to distressed clients calling a crisis center for the first time.

Facilitative conditions were measured by both Truax's and Lister's rating scales of offered empathy, warmth and genuineness. Outcome measures included the following: (1) the rated technical effectiveness of the crisis worker on the specific call, (2) the general rated mean level of technical effectiveness of the worker on a number of calls, (3) the changes in rated mean anxiety levels of the caller, (4) the changes in rated mean depression levels of the caller, and (5) the mean rated level of self-exploration of the caller.

Data were gathered on 65 untrained persons from the community and 27 persons engaged in developing or maintaining a role in a helping profession. The 27 professional crisis workers either (1) were in training in a helping profession (clinical psychology or counselor education), (2) were employed as professional staff workers at the crisis center, or (3) were practicing as professional counselors in a helping profession. A sample was taken of the second-through-fourth minutes of taped phone conversations to the crisis center. These calls were made by non-suicidal, deeply distressed callers who were phoning the center for the first time. This sample of calls was collected from the tape files for the first year of service (December, 1969, to December, 1970) at the Suicide Prevention and Crisis Intervention Service in Gainesville, Florida. Calls had to be of six minutes' or more duration. All calls meeting these criteria were randomly recorded on a master tape, to be judged by naive raters on therapeutic process variables and outcome measures.

Twenty-seven judges, nine per variable, were trained to rate the following research scales: (1) Truax's and Lister's empathic understanding scales, (2) Truax's and Lister's non-possessive warmth scales, or (3) Truax's and Lister's genuineness scales (Lister, 1971; Truax & Carkhuff, 1967). Three additional raters were trained to judge the callers' levels of anxiety, depression and self-exploration on the 92 three-minute tape segments. Each outcome scale was learned independently and tape segments rated one week after the previous outcome scale had been rated. Ratings and scores on both process and outcome variables were computed at the University of Florida and the Northern Illinois University Computing Centers. Analyses of variance, Pearson product-moment coefficients of correlation, t tests, a regression analysis and chi square tests of correlation were performed. Findings were analyzed in terms of rejecting or retaining the following directional hypotheses:

Hypothesis 1

There will be a significant difference in offered facilitative therapeutic conditions between lay volunteers and professional trainees with lay volunteers offering higher levels of conditions.

Hypothesis 2

Telephone therapists offering high levels of facilitative conditions will be significantly different than telephone therapists offering low levels of facilitative conditions on a wide variety of outcome measures.

Both of these hypotheses were retained and their null hypotheses rejected. The results provided several strong implications for crisis centers.

Generalizations based on this investigation are limited to the Suicide Prevention and Crisis Intervention Service of Gainesville, Florida. The sampling procedure selected crisis calls according to criteria of length, intensity of distress, type of call and period of time in the center's history. Results can only be evaluated in light of such calls to crisis services. Results may only be generalized to other investigations using the outcome measures employed in this study. The findings in this investigation had important implications for the future practices of (a) using, and (b) performing research on telephone therapists in crisis centers.

The most important findings in this investigation were four-fold. First, lay volunteers from the community who had never received any training in any helping profession were found to be as therapeutic or more therapeutic than professional trainees and professionals who had been specifically trained to be helpers. This result leads to serious questions about current training programs in the helping professions. In addition, it offered a valuable resource to crisis centers, as well as to other mental health facilities, who are faced with manpower shortages.

Secondly, this investigation provided a link between facilitative conditions and positive outcomes in a crisis center situation. For the first time, some generalizations can be

extended from the massive research done in psychotherapy and counseling situations to the activities of the crisis center. Crisis services can finally stop relying on face validity to justify their existence and can begin to provide research data to support their efficacy and operation.

Thirdly, this investigation provided a preliminary research paradigm to study outcomes in crisis centers. Besides finding several of these outcomes to be linked to variables of clinical effectiveness and levels of training, these outcome measures may well provide a bridge to further research into what makes an effective crisis worker and what denotes success from the perspective of the crisis service.

And lastly, this investigation has provided firm evidence that the variables of empathy, warmth and genuineness can provide crisis centers with useful tools. Lister's rating scales were especially attuned to defining and accurately assessing a crisis worker's effectiveness. This new rating method opened up new approaches for using facilitative conditions as primary data in crisis centers. Crisis services can now begin to select, assess and train their crisis workers and telephone therapists using these measures of clinical effectiveness. This investigation took a first step toward creating a new model of crisis theory, research and therapy.

APPENDICES

APPENDIX A

Truax Scale of Accurate Empathy

Stage 1

Therapist seems completely unaware of even the most conspicuous of the client's feelings; his responses are not appropriate to the mood and content of the client's statements. There is no determinable quality of empathy, and hence no accuracy whatsoever. The therapist may be bored and disinterested or actively offering advice, but he is not communicating an awareness of the client's current feelings.

Stage 2

Therapist shows an almost negligible degree of accuracy in his responses, and that only toward the client's most obvious feelings. Any emotions which are not clearly defined he tends to ignore altogether. He may be correctly sensitive to obvious feelings and yet misunderstand much of what the client is really trying to say. By his response he may block off or may misdirect the patient. Stage 2 is distinguishable from Stage 3 in that the therapist ignores feelings rather than displaying an inability to understand them.

Stage 3

Therapist often responds accurately to client's more exposed feelings. He also displays concern for the deeper, more hidden feelings, which he seems to sense must be present, though he does not understand their nature or sense their meaning to the patient.

Stage 4

Therapist usually responds accurately to the client's more obvious feelings and occasionally recognizes some that are less apparent. In the process of this tentative probing, however, he may misinterpret some present feelings and anticipate some which are not current. Sensitivity and awareness do exist in the therapist, but he is not entirely "with" the patient in the current situation or experience. The desire and effort to understand are both present, but his accuracy is low. This stage is distinguishable from Stage 3 in that the therapist does occasionally recognize less apparent feelings. He also may seem to have a theory about the patient and may even know how or why the patient feels a

APPENDIX A--Continued

particular way, but he is definitely not "with" the patient. In short, the therapist may be diagnostically accurate, but not emphatically accurate in his sensitivity to the patient's current feelings.

Stage 5

Therapist accurately responds to all of the client's more readily discernible feelings. He also shows awareness of many less evident feelings and experiences, but he tends to be somewhat inaccurate in his understanding of these. However, when he does not understand completely, this lack of complete understanding is communicated without an anticipatory or jarring note. His misunderstandings are not disruptive by their tentative nature. Sometimes in Stage 5 the therapist simply communicates his awareness of the problem of understanding another person's inner world. This stage is the midpoint of the continuum of accurate empathy.

Stage 6

Therapist recognizes most of the client's present feelings, including those which are not readily apparent. Although he understands their content, he sometimes tends to misjudge the intensity of these veiled feelings, so that his responses are not always accurately suited to the exact mood of the client. The therapist does deal directly with feelings the patient is currently experiencing although he may misjudge the intensity of those.

Stage 7

Therapist responds accurately to most of the client's present feelings and shows awareness of the precise intensity of most of the underlying emotions. However, his responses move only slightly beyond the client's own awareness, so that feelings may be present which neither the client nor therapist recognizes. The therapist initiates moves toward more emotionally laden material, and may communicate simply that he and the patient are moving towards more emotionally significant material.

Stage 8

Although the therapist in Stage 8 makes mistakes, these mistakes are not jarring, because they are covered by the tentative character of the response. Also, this therapist is sensitive to his mistakes and quickly changes his response in midstream, indicat-

APPENDIX A--Continued

ing that he has recognized what is being talked about and what the patient is seeking in his own explorations. The therapist reflects a togetherness with the patient in tentative trial and error exploration. His voice tone reflects the seriousness and depth of his empathic grasp.

Stage 9

The therapist in this stage unerringly responds to the client's full range of feelings in their exact intensity. Without hesitation, he recognizes each emotional nuance and communicates an understanding of every deepest feeling. He is completely attuned to the client's shifting emotional content; he senses each of the client's feelings and reflects them in his words and voice. With sensitive accuracy, he expands the client's hints into a full-scale (though tentative) elaboration of feeling or experience. He shows precision both in understanding and in communication of this understanding, and expresses and experiences them without hesitancy.

Summary Helping Guide

Truax
Scale
Points

- 1 Inaccurate responses to obvious feelings.
- 2 Slight accuracy toward obvious feelings. Ignores the deeper feelings. Slight accuracy toward obvious feelings. Concern with deeper feelings but inaccurate with regard to them.
- 3 Often accurate toward obvious feelings. Concern with deeper feelings and occasionally accurate with regard to them.
- 4 Often accurate toward obvious feelings. Concern with deeper feelings and fairly often accurate with regard to them although spotted by inaccurate probing.
- 5 Always accurate toward obvious feelings. Frequently accurate toward deeper feelings although occasionally misinterpreting them.
- 6 Always accurate toward obvious feelings. Frequently accurate toward the content but not the intensity of deeper feelings.
- 7 Always accurate toward obvious feelings. Frequently accurate

APPENDIX A--Continued

toward deeper feelings with regard to both content and intensity, but occasionally misses the mark of depth of intensity. May go too far in direction of depth.

- 8 Always accurate toward obvious feelings. Almost always accurate toward deeper feelings with respect to both content and intensity. May occasionally hesitate or err but correct quickly and accurately.
- 9 Always accurate toward obvious feelings and unerringly accurate and unhesitant toward deep feelings with regard to both content and intensity.

APPENDIX B

Lister Scale for the Measurement of Empathic Understanding

Definition

The counselor accurately communicates his perceptions of the client's own unique view of the world. The counselor takes an internal frame of reference and through perceptual inference assists the client to conceptualize more sharply the feelings or personal meanings which are most personal and unclearly defined.

Essential Elements of Counselor Response

Empathic understanding is present to the degree that the following elements are clearly evident in the counselor's response to his client.

1. An internal frame of reference. The counselor attempts to understand the world as it is perceived or experienced by the client. His responses clearly communicate "This is what I am able to understand about how things seem to you."
2. Perceptual inference. The counselor senses the feelings or meanings which are unclearly communicated by the client or of which the client himself is only dimly aware. The counselor engages in a process of trial-and-error approximation, through his own words, of the understandings, feelings, or meanings which are implicit in the client's statements or in the manner in which he speaks. The counselor definitely goes beyond the literal, surface statements of the client in his efforts to articulate the more personal meanings which the client is implying are present.
3. Accurate perceptual inferences. The counselor's inferences of the client's feelings and personal meanings are highly accurate, as evidenced by their effectiveness in aiding the client to state his feelings more clearly and to engage more deeply in the exploration of personal meanings.
4. Immediacy. The counselor responds to the client's feelings in such a way that it is clear that they are the feelings that are immediately present. While the client may be talking about his past or future, the only perceptions accessible to the counselor are those which the client expresses in the moment.

APPENDIX B--Continued

5. Emphasis on personal perceptions. The counselor responds selectively to those implied feelings which are most intimately related to the "self" of the client. Thus, the counselor chooses to respond to those elements of the client's communication which are most idiosyncratic, most essential to his psychological integrity, and which are most difficult for the client to admit to clear awareness.

6. Counselor's use of "fresh words" in stating his inference about the client's inner world. The counselor responds in words which are different from those used at the moment by the client, but they are not inappropriate for the client. Thus, the words and phrases voiced by the counselor are in essentially the same vein as those of the client and are the words he himself might use if he were at the moment able to state what is unclear, implicit, or "next."

7. Counselor's voice appropriate to the feelings expressed by the client. The counselor's manner, in particular his voice, is consistent with the client's feelings and perceptions. In this manner the counselor conveys that he grasps deeply the meanings of the client and that he appreciates and respects the other person who is attempting to share a portion of his world with him.

8. The counselor's "pointing" toward continued and more personal exploration of feelings and perceptions. The counselor conveys to the client his conviction that the essence of the counseling or psychotherapy process is the further expression and conceptualization of vaguely felt, personal meanings. In pointing toward more personal, idiosyncratic perceptions, the counselor communicates as well his willingness to be with the client in this process and to assist him in grasping and experiencing elusive perceptions and feelings.

Using the Scale

This preliminary version of the scale for measuring empathic understanding is designed primarily for use with recorded samples of counselor-client interaction, either individual or group. While this scale, like its predecessors developed by Truax (1961) and Carkhuff (1969), can probably be used reliably with written protocols of counseling interaction or with written counselor responses to simulated client statements, many of the subtle nuances present in audio and/or video recordings may well be lost, most notably the components which are evidenced through counselor voice qualities.

APPENDIX B--Continued

The foregoing elements of empathic understanding are to be scored separately based on the system below. The weighting system is designed to reflect the relative importance of each of the components in comprising the more-or-less unitary construct, empathic understanding. Thus, it is essential that the counselor take the internal frame of reference in order to provide the additional components. The scoring weights follow:

<u>Element of Empathic Understanding</u>	<u>Maximum Score Value</u>
1. Internal frame of reference	10 points
2. Use of perceptual inference	5 points
3. Accurate perceptual inference	5 points
4. Immediacy	5 points
5. Emphasis on personal perceptions	5 points
6. Use of "fresh words"	3 points
7. Appropriate voice	3 points
8. Pointing	<u>2 points</u> 38 points

By answering each of the following questions about a sample of counselor-client interaction, a score is obtained for each of the eight components and a total score representing the sum of the component scores.

Internal Frame of Reference

1. To what extent does the counselor try to perceive the world as it appears to the client?
 - a. To a great extent. The counselor actively tries to grasp the client's perception of persons, things, and events. Exclusive use of internal frame of reference (more than two-thirds of all counselor response). 10 points

APPENDIX B--Continued

- b. Frequent use of internal frame of reference (one-third to two-thirds of counselor responses). 7-9 points
- c. Occasional use of internal frame of reference (less than one-third of counselor response). 4-6 points
- d. No evidence about frame of reference or no opportunity to respond empathically. (For example, the counselor is answering a factual question). 1-3 points
- e. The counselor avoids reference to the client's perceptions or feelings. The counselor's response to the client's expressions are in terms of how things are, what the counselor thinks or feels, or about how others think and feel. 0 points

Scoring Note: If this element is scored 0, disregard all remaining elements and give 0 for the total rating for the sample.

Use of Perceptual Inference

- 2. To what extent does the counselor engage in a process of inference to arrive at meanings and perceptions which are not sharply differentiated in the awareness of the client.
 - a. There is ample evidence of the counselor's efforts to infer the deeper, more personal significance of the client's statements. 3-5 points
 - b. There is no evidence of the counselor's use of inference, or the counselor has no opportunity to make inference during the sample under consideration. 1-2 points
 - c. The counselor repeatedly fails to make inferences when presented

APPENDIX B--Continued

with the opportunity, i.e., when there is evidence either from context or manner of speaking that the client is communicating more than just a simple statement of fact.

0 points

Accurate Perceptual Inferences

3. The counselor's efforts to infer and state the feelings and meanings implicit in the client's statements are accurate to a high degree.

a. Yes. The counselor's high level of accuracy is evidenced by the client's "picking-up-and going father" responses to the counselor's inferential statements.

3-5 points

b. The accuracy of the counselor's inferences are negligible, or little opportunity is provided for the counselor to make inferences.

1-2 points

c. There are serious inaccuracies in the counselor's inferential statements, as evidenced by their disruption of the client's exploration of feelings and meanings.

0 points

Immediacy

4. Does the counselor respond to the client's feelings in such a way that he highlights their immediacy?

a. Yes. There is ample evidence that the counselor's focus is on the immediate now of feelings or perceptions, even when the client is speaking about events in the past or future. The counselor makes explicit references to immediacy, such as "as you remember now what he said to you, you're starting to feel ..."

3-5 points

APPENDIX B--Continued

- b. There is no evidence of the counselor's emphasis on immediacy of feelings, or the counselor has no opportunity for such an emphasis during the sample of interaction under consideration. 1-2 points
- c. The counselor makes no effort to put feelings on an immediate basis when he has an opportunity. He may tend instead to respond to feelings, but use a verb tense other than present. 0 points

Emphasis on Personal Perceptions

- 5. Does the counselor select for explorations those implied feelings which are most central to the "self" of the client or those which appear to be most imbued with personal significance for the client?
 - a. Yes. There is evidence of the counselor's selection perceptions which are highly relevant to the self of the client, and the counselor responds to them in terms which affirms that they are the unique feelings of that individual at that point in time, that no other person feels or has felt just quite the same. 3-5 points
 - b. There is no evidence that the counselor selects the more personal feelings or perceptions, or there may be no opportunity for such during the sample involved. 1-2 points

Use of "fresh words" by the Counselor

- 6. Does the counselor choose fresh words in stating those client feelings and meanings which he is attempting to help the client to conceptualize?
 - a. There is clear evidence of counselor's effort to use new words which are

APPENDIX B--Continued

very possibly the words the client himself would choose if he were able to express the feeling which the counselor assists him in putting into words.

2-3 points

- b. No evidence of effort to use fresh words, or the opportunity does not present itself in this sample of interaction.
- c. The counselor uses the client's own words, restating without adding meaning, mirroring, echoing, or "parrotting" the client's statements in a mechanical fashion.

1 point

0 points

Counselor uses Appropriate Voice

- 7. In the counselor's voice appropriate to the feelings being expressed by the client?
 - a. Yes. There is a discernible quality in the counselor's voice which conveys a recognition of the personal nature of the client's perceptions, and, while the counselor remains a separate person, his voice communicates a close attentiveness with marked appreciation of those aspects of the client's world he is privileged to share.
 - b. No evidence of such effort present in this sample, but there is no marked inconsistency between counselor's voice and client's feelings expressed.
 - c. There is marked discrepancy between the counselor's voice and the expression of the client.

2-3 points

1 point

0 points

APPENDIX B--Continued

Counselor Pointing Toward Personal Exploration

8. The counselor communicates explicitly and implicitly that he and the client are moving toward a deeper and fuller exploration of feelings, meanings, and perceptions.
- a. To a significant degree. There is clear evidence that the counselor communicates to the client that the clarification and exploration of meaning is the stock in trade of counseling and that more of this is to come. 1-2 points
- b. No. The counselor allows the impression to be formed by the client that explorations of feeling may be occasional, may occur only at certain stages of counseling, or even that they are accidental. 0 points

Revised July 15, 1970

APPENDIX C

Truax Scale of Nonpossessive Warmth

General Definition

The dimension of nonpossessive warmth or unconditional positive regard, ranges from a high level where the therapist warmly accepts the patient's experience as part of that person, without imposing conditions; to a low level where the therapist evaluates a patient or his feelings, expresses dislike or disapproval, or expresses warmth in a selective and evaluative way.

Thus, a warm positive feeling toward the client may still rate quite low in this scale if it is given conditionally. Nonpossessive warmth for the client means accepting him as a person with human potentialities. It involves a nonpossessive caring for him as a separate person and, thus, a willingness to share equally his joys and aspirations or his depressions and failures. It involves valuing the patient as a person, separate from any evaluation of his behavior or thoughts. Thus, a therapist can evaluate the patient's behavior or his thoughts but still rate high on warmth if it is quite clear that his valuing of the individual as a person is uncontaminated and unconditional. At its highest level this unconditional warmth involves a nonpossessive caring for the patient as a separate person who is allowed to have his own feelings and experiences; a prizing of the patient for himself regardless of his behavior.

It is not necessary--indeed, it would seem undesirable--for the therapist to be nonselective in reinforcing, or to sanction or approve thoughts and behaviors that are disapproved by society. Nonpossessive warmth is present when the therapist appreciates such feelings or behavior and their meaning to the client, but shows a nonpossessive caring for the person and not for his behavior. The therapist's response to the patient's thoughts or behaviors is a search for their meaning or value within the patient rather than disapproval or approval.

Stage 1

The therapist is actively offering advice or giving clear negative regard. He may be telling the patient what would be "best for him," or in other ways actively approving or disapproving of his behavior. The therapist's actions make himself the locus of evaluation; he sees himself as responsible for the patient.

APPENDIX C--Continued

Stage 2

The therapist responds mechanically to the client, indicating little positive regard and hence little nonpossessive warmth. He may ignore the patient or his feelings or display a lack of concern or interest. The therapist ignores client at times when a nonpossessively warm response would be expected; he shows a complete passivity that communicates almost unconditional lack of regard.

Stage 3

The therapist indicates a positive caring for the patient or client, but it is a semipossessive caring in the sense that he communicates to the client that his behavior matters to him. That is, the therapist communicates such things as "It is not all right if you act immorally," "I want you to get along at work," or "It's important to me that you get along with the ward staff." The therapist sees himself as responsible for the client.

Stage 4

The therapist clearly communicates a very deep interest and concern for the welfare of the patient, showing a nonevaluative and unconditional warmth in almost all areas of his functioning. Although there remains some conditionality in the more personal and private areas, the patient is given freedom to be himself and to be liked as himself. There is little evaluation of thoughts and behaviors. In deeply personal areas, however, the therapist may be conditional and communicate the idea that the client may act in any way he wishes--except that it is important to the therapist that he be more mature or not regress in therapy or accept and like the therapist. In all other areas, however, nonpossessive warmth is communicated. The therapist sees himself as responsible to the client.

Stage 5

At stage 5, the therapist communicates warmth without restriction. There is a deep respect for the patient's worth as a person and his rights as a free individual. At this level the patient is free to be himself even if this means that he is regressing, being defensive, or even disliking or rejecting the therapist himself. At this stage the therapist cares deeply for the patient as a person, but it does not matter to him how the patient chooses

APPENDIX C--Continued

to behave. He genuinely cares for and deeply prizes the patient for his human potentials, apart from evaluations of his behavior or his thoughts. He is willing to share equally the patient's joys and aspirations or depressions and failures. The only channeling by the therapist may be the demand that the patient communicate personally relevant material.

APPENDIX D

Lister Scale for the Measurement of Facilitative Warmth

Definition

The counselor communicates that he prizes the client as a likeable, worthwhile human being. The counselor's "warmth" is expressed without reservation or condition, i.e., it is free or "unearned" by the client, and is expressed independent of the client's progress, growth, good behavior or attitudes. In short, the counselor communicates implicitly or explicitly: "I like you -- period!"

Essential Elements of Counselor Response

Facilitative warmth has been variously defined as unconditional positive regard (Rogers, 1957), nonpossessive warmth (Traux and Carkhuff, 1967), and respect (Carkhuff, 1969). In an effort to retain the concepts underlying previous conceptualizations and approaches to measurement, two essential elements are delineated in this scale: positive regard and unconditionality of regard.

1. Positive regard. The counselor experiences and communicates a deep, personal liking for the client. He lets him know that he, the counselor, finds the client to be a worthwhile, likeable person. The counselor's positive regard is expressed in such a manner that it is understood that the counselor finds this other person likeable and worthwhile, in contrast to the communication of a more abstract, impersonal respect for all clients or for all of mankind.

2. Unconditionality of regard. The counselor's expressions of regard for the client are in no way abridged by the client's behavior, attitudes, potential, progress in counseling, or by his feelings toward the counselor. In short, there is nothing whatsoever that the client must do or be in order to merit the counselor's positive regard.

Using the Scale

This preliminary version of the scale for measuring facilitative warmth is designed primarily for use with recorded samples of counselor-client interaction, either individual or group. While this scale, like its predecessors (Truax and Carkhuff, 1967,

APPENDIX D--Continued

Carkhuff, 1969), can possibly be used reliably with written protocols of counseling interaction or with written counselor responses to simulated client statements, many of the subtle nuances present in audio and/or video recordings may well be lost, most notably the components which are evidenced through counselor voice qualities.

The two major elements of facilitative warmth are to be scored separately according to the following guidelines. The weighting system is constructed so that the element of positive regard is given the highest value. Unless there is some evidence, however slight, of the counselor's positive regard for the client, the entire scale is scored zero without further consideration. The scoring weights are:

<u>Elements of Facilitative Warmth</u>	<u>Maximum Score Value</u>
1. Positive regard	<u>10 points</u>
2. Unconditionality of regard	<u>5 points</u>

Scoring Guidelines

1. Positive regard. To what extent does the counselor communicate that he really likes, enjoys, appreciates, or values this person who he is attempting to aid?

- a. To a very great extent. The counselor makes it clear that he likes this client a great deal. The counselor's warmth is expressed in such a way that it is unmistakably expressed toward the client as an individual. Thus, there is no possibility for the client to construe the counselor as a warm person, generally; rather the client experiences the counselor's warmth elicited by him. 9-10 points
- b. The counselor communicates a high degree positive regard for the client; however, the counselor's warmth is expressed more as his personal characteristic than as his response to the client. In short the client could feel, "He's like this with everyone he talks with." 6-8 points

APPENDIX D--Continued

- c. There is moderate positive regard expressed by the counselor. While there is implicit or explicit evidence that the counselor does regard the client in a positive manner, this level is distinguished from the previous one in terms of (1) level of regard and (2) impersonality of regard. Thus, the level of regard expressed is approximately equivalent to that expressed in business or polite social interactions, and the regard is clearly more toward "clients" than toward the individual with whom the counselor is talking. 3-5 points
- d. The counselor is indifferent to the client in terms of positive regard. There is no evidence of liking or disliking the client, either as a person or as a class of persons. In summary, the counselor either does not experience or successfully masks all positive or negative feelings toward the client. 1-2 points
- e. There is clear evidence of the counselor's negative regard or dislike for the client. 0 points

Scoring Note: If this element is scored 0, disregard the second element, unconditionality of regard.

2. Unconditionality of regard. To what extent is the counselor's warmth toward the client unqualified or unconditional?

- a. To a very great extent. It is clearly evident that the counselor's warmth toward the client is unreserved, with "no strings attached." There is no implicit or explicit evidence of the counselor's effort to control or influence the client's behavior or attitudes; suggestions or alternatives, when presented, are genuine options for the client. 4-5 points

APPENDIX D--Continued

- b. There is evidence of possessiveness or conditionality of the counselor's warmth in that the counselor subtly indicates that the client should think, feel, or act in some particular way in order to be valued by the counselor. This level is distinguished from the previous one by the counselor's failure to communicate clearly that he is in no way evaluative toward the client. 2-3 points
- c. There is much evidence of conditionality of the counselor's warmth. The counselor indicates that insofar as major aspects of the client's feelings and behavior are concerned, the counselor's warmth toward the client is dependent upon the client's thinking, feeling, or acting in "correct" ways. 1 point
- d. Any counselor warmth expressed toward the client is conditional. There is no evidence that there are any areas of the client's thoughts, feelings, or actions which are not subject to evaluative scrutiny by the counselor. 0 points

July 28, 1970

APPENDIX E

Truax Scale of Therapist Genuineness

General Definition

Perhaps the most difficult scale to develop has been that of therapist genuineness. However, though there are notable points of inconsistency in the research evidence, there is also here an extensive body of literature supporting the efficacy of this construct in counseling and therapeutic processes.

This scale is an attempt to define five degrees of therapist genuineness, beginning at a very low level where the therapist presents a facade or defends and denies feelings; and continuing to a high level of self-congruence where the therapist is freely and deeply himself. A high level of self-congruence does not mean that the therapist must overtly express his feelings but only that he does not deny them. Thus, the therapist may be actively reflecting, interpreting, analyzing, or in other ways functioning as a therapist; but this functioning must be self-congruent, so that he is being himself in the moment rather than presenting a professional facade. Thus the therapist's response must be sincere rather than phony; it must express his real feelings or being rather than defensiveness.

"Being himself" simply means that at the moment the therapist is really whatever his response denotes. It does not mean that the therapist must disclose his total self, but only that whatever he does show is a real aspect of himself, not a response growing out of defensiveness or a merely "professional" response that has been learned and repeated.

Stage 1

The therapist is clearly defensive in the interaction, and there is explicit evidence of a very considerable discrepancy between what he says and what he experiences. There may be striking contradictions in the therapist's statements, the content of his verbalization may contradict the voice qualities or nonverbal cues (i.e., the upset therapist stating in a trained voice that he is "not bothered at all" by the patient's anger).

Stage 2

The therapist responds appropriately but in a professional rather than a personal manner, giving the impression that his re-

APPENDIX E--Continued

sponses are said because they sound good from a distance but do not express what he really feels or means. There is a somewhat contrived or rehearsed quality or air of professionalism present.

Stage 3

The therapist is implicitly either defensive or professional, although there is no explicit evidence. (Two patients are present in the sample given).

Stage 4

There is neither implicit nor explicit evidence of defensiveness or the presence of a facade. The therapist shows no self-incongruence.

Stage 5

The therapist is freely and deeply himself in the relationship. He is open to experiences and feelings of all types--both pleasant and hurtful--without traces of defensiveness or retreat into professionalism. Although there may be contradictory feelings, these are accepted or recognized. The therapist is clearly being himself in all of his responses, whether they are personally meaningful or trite. At stage 5 the therapist need not express personal feelings, but whether he is giving advice, reflecting, interpreting, or sharing experiences, it is clear that he is being very much himself, so that his verbalizations match his inner experiences.

APPENDIX F

Lister Scale for the Measurement of Facilitative Genuineness

Definition

The counselor is genuine, authentic, and personally non-defensive in his relationship with the client. He speaks openly rather than defensively, spontaneously rather than cautiously or deliberately. The counselor relates as himself rather than as the embodiment of a professional role stereotype.

Essential Elements of Counselor Response

The counselor communicates facilitative genuineness to the degree that the following elements are clearly evident in his responses to the client.

1. Undefensive Openness. The counselor is fully receptive to the communication of the client and exhibits no evidence of threat or discomfort in his relationship with the client.

2. Spontaneity. The counselor unhesitatingly responds to the client without censoring or editing his communication. The counselor's responses grow out of the immediacy of the relationship.

3. Honesty. The counselor's statements to the client are true. That is, the counselor communicates his honest, personal perceptions. The client is not "put on," and the counselor makes no effort to be obscure about the nature of his efforts to help the client; rather, he makes an open effort to "let the client in on" his hypotheses and procedures.

4. Relaxed Voice. The counselor's voice is not strained or "false." There is high congruence between the counselor's voice and the content of his communication.

5. Idiosyncratic Style. The counselor's "style" of interaction, while perhaps identifiable belonging to a particular "school" or orientation, is indelibly stamped with the counselor's own personality. Thus, the counselor speaks in a way that is his rather than as if the responses came from a textbook.

APPENDIX F--Continued

Using the Scale

This preliminary version of the scale for measuring facilitative genuineness is designed primarily for use with recorded samples of counselor-client interaction, either individual or group. While this scale, like its predecessors developed by Truax (1961) and Carkhuff (1969) can possibly be used reliably with written protocols of counseling interaction or with written counselor responses to simulated client statements, many of the subtle nuances present in audio and/or video recordings may well be lost, most notably the components which are evidenced through counselor voice qualities.

The foregoing elements of facilitative genuineness are to be scored separately based on the system outlined below. The weighting system is designed to reflect the relative importance of each of the components in comprising the more-or-less unitary construct, facilitative genuineness. The scoring weights follow.

<u>Element of Facilitative Genuineness</u>	<u>Maximum Score Value</u>
1. Undefensive Openness	10 points
2. Spontaneity	5 points
3. Honesty	5 points
4. Relaxed Voice	5 points
5. Idiosyncratic Style	3 points
	28 points

By answering each of the following questions about a sample of counselor-client interaction, a score is obtained for each of the five components and a total score representing the sum of the component scores.

1. Undefensive Openness. To what extent is the counselor open and undefensive in his relationship with the client?

- a. To a great extent. The counselor's psychological security and comfort in the relationship are independent of the client's communications. The counselor has no need to be "on guard," careful,

APPENDIX F--Continued

or protective of himself of his professional role or status.

10 points

- b. There is some evidence that the counselor, while generally open and receptive to the client, is insecure and defensive in certain respects.

7-9 points

- c. The counselor's openness or un-
defensive receptivity is narrowly
restricted to certain aspects of
the client's communication.

4-6 points

- d. The counselor is defensive and in-
secure in the relationship but
makes no explicit effort to deny his
discomfort.

1-3 points

- e. The counselor gives explicit evidence
of insecurity in the relationship but
attempts to hide his discomfort from
the client. He "protests" too much.

0 points

Scoring Note: If this element is scored 0, disregard all re-
maining elements and give 0 as the total rating for the sample.

2. Spontaneity. To what extent does the counselor respond
spontaneously in the relationship?

- a. There is ample evidence that the
counselor's responses are immediate
and uncensored. While the counselor
may at times hesitate in responding
to the client, he does so because
his perceptions or feelings are un-
clear, not because he knows what he
wants to say but is groping for the
best way to phrase it.

4-5 points

- b. The counselor's spontaneity is limited
to certain aspects of the relationship,
usually tangential, superficial areas.
Also, the counselor may exhibit no
spontaneity and make no effort to do so. 1-3 points

APPENDIX F--Continued

- c. The counselor not only lacks spontaneity, but attempts to fake if. 0 points

3. Honesty. To what extent does the counselor honestly communicate his personal, subjective perceptions?

- a. There is ample evidence that the counselor's responses are an expression of his deep personal conviction. In short, the counselor believes everything he says to the client. 4-5 points

- b. There is some evidence that, while generally honest, the counselor "hedges" a bit, particularly in those areas where he feels his honest perceptions would hurt the client or impair the relationship. 1-3 points

- c. There is explicit evidence that the counselor makes numerous statements which contradict his perceptions. The counselor may be telling the client what he thinks the client expects of him; he may attempt to camouflage the real purpose of his questions; or he may assume a role which he feels necessary to elicit certain feelings from the client. 0 points

4. Relaxed Voice. To what extent does the counselor's voice indicate freedom from discomfort in the relationship and a consistency between what the counselor perceives and what he says?

- a. To a great extent. The counselor's voice appears uniformly consistent with his feelings and perceptions. 4-5 points
- b. There is evidence of some inconsistency between the counselor's voice and feelings, but the counselor appears generally congruent in most of his verbalization. 1-3 points
- c. The counselor's voice is unmistakably incongruent with his inner experience.

APPENDIX F--Continued

Tension or discomfort is present to a marked degree.

0 points

5. Idiosyncratic Style. To what extent is the counselor's verbal response style of interaction free form, stereotyped, formal, or "textbook" phrases?

- a. Completely. The counselor's style is unmistakably personal. The counselor's theory or techniques, which may be identifiable, are essentially independent of the counselor's verbal style. The counselor words and phases are uniquely his own.

3 points

- b. While the counselor's style is to some extent formal or stereotyped, the counselor's personal style is present to a significant degree.

1-2 points

- c. There is no evidence of the person of the counselor. His style is a studied replica of the "expert." His style, while generally appropriate, clearly does not fit him.

0 points

August 27, 1970

APPENDIX G

The Fowler Technical Effectiveness (TE) Scale

Item	Scoring Criterion
1. Can the caller be immediately re-contacted?	In order to answer this question affirmatively the call must contain enough information to enable the center to return the call and contact the caller; or to immediately go to the caller.
2. Did the volunteer ask for (or obtain) specific information regarding significant others?	A specific question dealing with the possibility of roommates, parents, neighbors, friends, or relatives, etc. must occur in order to answer this question "yes". A general inquiry such as "do you have someone you can talk to" will not be enough to qualify as a "yes" answer.
3. Were specific problems identified?	A problem identified to which the center can respond, even if it is not the focal problem, will qualify for a "yes" answer.
4. Did the volunteer communicate that he is willing to help?	This question may be answered on the basis of both affect and/or content.
5. Did the volunteer develop a structured plan of action or help the caller develop one?	A structured plan of action must lead to some action or event that will involve the caller in an observable behavior.
6. Did the caller agree to the action plan?	A definite commitment must be obtained from the caller in order for this question to be answered "yes."

APPENDIX G--Continued

Item	Scoring Criterion
7. Was it determined whether or not this was a suicide case?	Specific inquiry from worker mentioning "suicide" or "kill self"; or spontaneous statement from caller may be scored.
8. a. Did the volunteer ask about a suicide plan?	Answer either (a) or (b), but <u>not</u> both.
b. If caller voluntarily disclosed the information, did volunteer inquire for further details?	
9. Was it determined if caller has made prior suicide attempts?	Specific inquiry must be made by the worker or a spontaneous statement from caller may be scored.

APPENDIX H

Anxiety Rating Scale

Instructions

Purpose: The present scale is an attempt to measure the degree of anxiety which the caller exhibits during the time periods of the tape segment.

Scoring: To score the level of the caller's anxiety, the judge assigns a score value from One to Five to each segment that is to be scored. Scores of Five are to represent the highest level of anxiety that the caller can exhibit and represent an extremely disturbed high-activation affective state.

The Scoring Levels

Level One (No Anxiety)

No anxiety at all is present in the caller's verbal or vocal behavior. He makes no expressive sounds which reflect anxiety and sounds very calm and collected during the phone call.

Level Two (Less than Moderate Anxiety)

There is some minimal anxiety reflected in the caller's verbal or vocal behavior but less than a moderately anxious person would exhibit.

Level Three (Moderate Anxiety)

There is a fair amount of anxiety in the person's voice or verbal content over the phone. He makes expressive sounds which reflect moderate anxiety during the phone call segment.

Level Four (More than Moderate Anxiety)

There is a great deal of anxiety being reflected in the caller's verbal or vocal behavior. He sounds agitated and disturbed, in a distressed affective state.

Level Five (Extreme Anxiety)

The caller exhibits extreme anxiety in his voice or vocal behavior. He makes expressive sounds which reflect his extreme distress and affective turmoil during the phone call segment.

APPENDIX I

Depression Rating Scale

Instructions

Purpose: The present scale is an attempt to measure the degree of depression which the caller exhibits during the time periods of the tape segment.

Scoring: To score the level of the caller's depression, the judge assigns a score value from One to Five to each segment that is to be scored. Scores of Five are to represent the highest level of depression that the caller can exhibit and represent an extremely disturbed low-activation affective state.

The Scoring Levels

Level One (No Depression)

No depression is present in the caller's verbal or vocal behavior. He makes no expressive sounds which reflect anxiety and sounds energetic and appropriately spontaneous during the phone call.

Level Two (Less than Moderate Depression)

There is some minimal depression reflected in the caller's verbal or vocal behavior but less than a moderately depressed person would exhibit.

Level Three (Moderate Depression)

There is a fair amount of depression in the person's voice or verbal content over the phone. He makes expressive sounds which reflect moderate depression during the phone call segment.

Level Four (More than Moderate Depression)

There is a great deal of depression being reflected in the caller's verbal or vocal behavior. He sounds "down", slow in his speech, has little energy, and is in a disturbed affective state.

Level Five (Extreme Depression)

The caller exhibits extreme depression in his voice or vocal behavior. He makes expressive sounds which reflect his extreme feeling of being "down" with little or no energy to activate himself.

APPENDIX J

Revealingness Rating Scale

Instructions

- Purpose: The present scale is an attempt to measure the degree to which a subject willingly reveals himself through his verbal behavior.
- Scoring: To score the subjects responses the judge assigns a scale value from Zero to Six to each segment that is to be scored. The judge must make himself familiar with the descriptions of behavior which are appropriate for the various scoring levels. Scores are to represent the highest level that the subject maintains in the segment to be judged.
- Note: It is important to keep in mind the question to which this scale is addressed: How well does the subject let the listener get to know him?

The Scoring Levels

Level Zero (No Talking or Refusing to Answer the Question)

No talking at all. The subject presents no verbal or vocal behavior. He makes no expressive sounds such as sighing, laughing, crying, etc. Defensive silences are scored at this level. A simple refusal to answer the question is also scored at this level.

The listener learns nothing about the subject (except possibly that the subject does not want to be known at all).

Level One (Description of Externals)

The subject does not talk about himself as he is now. He talks only about externals or about himself as if he were an external object. This material is presented with no feeling. The subject describes external events, gives intellectual ideas or theories but he offers no evaluations or opinions. He says nothing at all which is relevant to his personality.

Level Two ("Cool" Attitudes About Externals)

The subject does not talk about himself as he is now. He talks about external events but he is willing to reveal his rela-

APPENDIX J--Continued

tionship to these events. He is willing to reveal the stand that he has taken, (i.e., he gives attitudes, opinions, evaluations of things, etc.) but he does this unemotionally, intellectually, and not very strongly.

He makes no socially undesirable statements.

Although this verbalization may help the listener to know the subject a little, the listener gets the impression that the subject was not attempting to make himself known.

Level Three (Remote Observer of Internal Experience)**

The subject talks about himself but there is no self-involvement in what he says. His style of expression is externalized, intellectualized, mechanical, distant, etc. (e.g., He may say "one", or "people", or "they", instead of using the personal pronoun "I".) He talks like a remote observer of himself. His distance from himself and lack of self involvement is manifested in his flat voice as well as his externalized style of talking.

He says things that one might say in public to a mere acquaintance. His conversation is casual and social; not private. He uses cliches and stereotyped language. His speech has a contrived or rehearsed quality to it. His voice has a very impersonal ring to it.

You get the impression that he says what he says because it sounds good from a distance but not because it expresses what he really feels.

The listener gets the impression that the subject is willing to tell something about himself, but also wished to do it without self-involvement as he talks. This verbalization may help the listener to know the subject better, but only slightly. The subject consistently keeps his feelings out of his voice.

- II. Levels 1-3 are appropriate for responses which, although differing in degree of importance to the Subject, in content, are nevertheless made without any indication of feeling or emotion in the subject's voice. (If feeling enters into the subject's communication then level Four or Five would be appropriate depending on how long it is maintained.)

****Note:**

- I. Responses in which there is a discrepancy between feeling and content are scored at this level, e.g., Responses made by a person who is obviously upset who says, in a strained voice, "I'm not bothered at all" or a person who calmly informs someone how much he hates him, would be scored at this level.

APPENDIX J--Continued

Level Four (Internal Observer with Momentary Involvement)**

The subject talks about himself in the style of Level Three (i.e., externalized, intellectualized, etc.) but there is a momentary self involvement in what he says. The style of the subject's speech or the quality of his voice indicate to the listener that the subject, for a short time is "self-involved".

He says things that one might say to someone who seems trustworthy but with whom he has not had a close intimate relationship.

The listener gets the impression that the subject, while not necessarily desiring to reveal his feelings, is willing to talk about himself. At times his voice betrays some feeling and involvement in what he is saying.

Level Five (Internal Narrator)

The subject expresses himself with self involvement and feeling. The feeling in his voice indicates that the subject is expressing himself rather than just talking about himself.

He reveals himself the way that one would to a trusted friend.

He does not attempt to present himself in a socially favorable manner.

The listener gets the impression that the subject is being honest and wants to express his present feelings. He gives the listener the impression that he is getting to know the subject as the subject feels himself to be. There is no sense that the subject is evading, or backing away, or disguising himself, etc. The listener feels trusted.

Level Six (Searching for New Meanings or Fresh Expression of Feelings)

The subject is actively trying to explore his personality and his world even though, at the moment, he might be doing so fearfully and tentatively. He may be discovering new feelings or new aspects of himself. He may be talking about his values, his perceptions of others, his relationships, his fears, or his life choices but, in any case, he is taking the risks involved in self exploration. He speaks with spontaneity and feeling in his voice. Although this level would be appropriate for those responses in which the subject becomes "emotional", it would also apply to segments in which the subject freely communicates with the listener as he discovers new feelings or new aspects of himself. He talks about himself in a manner which, for most people, would

**Note:

Level Four is essentially Level Three with a momentary addition of the characteristics of Level Five.

APPENDIX J--Continued

be reserved for a trusted friend. The listener gets the impression that he is getting to know the subject intimately and deeply and that the subject is taking the risk of sharing the process of self discovery with him. The listener has the feeling that the subject trusts him with his newest, or strongest, or most tentative feelings.

APPENDIX K

Kind of Crisis

Tape Segment Number	Primary Problem Area	Description of Crisis	Rated intensity of distress (low= 1, high= 5)
1.	Affective state	A woman is depressed and angry at everyone in her environment. These intensify during her menstrual cycle. At this time, she has a deep feeling that she wants to kill everyone.	3
2.	Relationship and affective state	A woman who is separated from her husband is very depressed. She has been drinking, is lonely and worried.	4
3.	Affective state	Caller is crying. She is depressed and feels lonely. She is disabled. Her husband died a year ago and her son was killed in Vietnam one week ago.	5
4.	Affective state	Caller is depressed and wants advice. He got in a fight with his girlfriend and they broke up. Now he is upset.	2
5.	Affective state and relationship	Woman is crying and worried. Her husband is drinking and smoking marijuana. She feels he is regressing and she wants to leave him.	3
6.	Affective state	Caller escapes from reality. Caller is lonely and depressed. Doesn't want to deal with problems of living.	4

APPENDIX K--continued

7. Relationship and affective state 3
Caller's girlfriend is going out with other boys behind his back. He is trying to sort out his feelings and explore his relationship with her.
8. Affective state 2
Girl is planning an abortion. She does not know if she wants one and is upset that something might happen to her.
9. Relationship 4
Caller is upset because of relationship problems. Feels that they can not get along with anyone. Feels that they have no one to turn to in order to satisfy their loneliness.
10. Affective state 3
Caller is depressed. Feels can not do anything. Is having morbid thoughts and they feel they might be "crazy".
11. Affective state 3
Has been taking pills to calm self. Feels they are depressed and can not communicate to spouse. Is thinking about suicide as a way out.
12. Relationship 3
Has been taking drugs. Her husband is physically disabled but won't give her a divorce. Feels her boyfriend won't help her solve her problems. Feels hopeless.
13. Relationship and affective state 5
Caller is crying. Feels it is hopeless. They are depressed. Problems center around marital conflict. Caller feels it is hopeless and is thinking of ending it.

APPENDIX K--continued

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| 14. | Affective state | Caller is upset over separation from spouse. They are thinking of hurting themselves. They want help to control their feelings. | 3 |
| 15. | Relationship | Problems with his girlfriend. Feelings of anger and hurt. Has an "out of control" feeling. | 2 |
| 16. | Affective state | Caller feels a mental breakdown is coming. Is having problems at home because his parents give him trouble. He is jittery and has been taking drugs lately. | 2 |
| 17. | Relationship | Caller is crying. They are alcoholic. Their spouse beats the children and has taken the children away somewhere. | 4 |
| 18. | Affective state | Caller is crying. Feels that they can not cope. Their husband left the state. Feels lonely and depressed. It is hopeless and the caller does not feel that they want to live. They feel that they can just barely live now. | 4 |
| 19. | Affective state | Caller is having a drug experience with very intense emotions going on. Wants someone to calm him down. | 4 |
| 20. | Affective state | Caller feels the problem is within themselves. Overeats and is anxious. They feel like they are going down the path toward suicide. | 2 |
| 21. | Affective state | Caller is afraid to drive. Feels that they might pass out from "spells". Feel they have a great number of personal problems that are upsetting them. | 3 |

APPENDIX K--continued

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| 22. | Relationship and affective state | 3 | Caller feels they have many problems. They feel bad about themselves and their obesity. They feel their mother "hassles" them. |
| 23. | Affective state | 2 | Caller is thinking about suicide. They feel there is no meaning in life and that all they have are problems. |
| 24. | Affective state | 2 | Person has lost private business. Has bad feeling inside. Has no energy and has lost their outgoingness quality that they had previously. |
| 25. | Affective state and relationship | 3 | Caller is tired and depressed. He feels everything is hopeless. He feels that he is not wanted. He wants to die. Caller stated that "people say I'm crazy". He is having trouble with his wife. |
| 26. | Affective state | 3 | Person cries a lot and thinks "bad" thoughts. They just broke off a long-standing relationship. They have now quit going to school and feel that they are out of touch with their friends. They just sit home all day. |
| 27. | Affective state | 4 | Caller is depressed. They have been taking cough medicine. They are having visions and feel that they have lost contact with time. They are very upset about their present state. |

APPENDIX K--continued

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| 28. | Affective state | Person has lost job, is separated from spouse and can not get a job because of being upset. They feel that they get upset a couple of times each month. Feel they have "nerves". | 3 |
| 29. | Relationship | Caller is having marital problems. The spouse wants a divorce. They feel that the situation is hopeless. | 3 |
| 30. | Relationship and affective state | Caller just wants to die. Is disabled with arthritis and has recently had surgery. Is crying and feels very lonely. They have had many problems with their daughters and recently lost spouse. | 4 |
| 31. | Affective state | An adolescent boy has been stealing and is feeling guilty. Does not know what to do about his feelings. | 2 |
| 32. | Relationship | Caller's boyfriend left her and took off on a trip. They have several conflicts recently and the caller is upset about her mixed up feelings. | 3 |
| 33. | Relationship | Caller is having problems with her boyfriend. She feels bad about the relationship. | 2 |
| 34. | Affective state | Caller is depressed and is thinking about suicide as an escape. The caller feels that God talks to them. Feels that the situation is hopeless. | 4 |

APPENDIX K--continued

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| 35. | Affective state | Caller is having excessive anxiety and is very upset. They can not sleep and are compulsively eating. They are taking Mellaril with no effect. They want a psychiatrist to talk to. They feel they are all "wound up". | 5 |
| 36. | Relationship | Caller feels that people resent them. Caller says things to people that he does not mean. He lies and builds up his ego with tall tales. Feels that he can not get along with the world. | 2 |
| 37. | Affective state | Person lost job and is drinking heavily. Has a drinking problem. He is now very depressed and upset. Wants to go home but is afraid of wife. | 4 |
| 38. | Relationship . | Caller is a mother who wants to kill her daughter. Feels that she hates her and is tired of her causing her troubles. Claims the daughter stays out all night. The mother is very angry at her. | 3 |
| 39. | Relationship and affective state | Caller is having problems with girls. He feels that he is impotent and inadequate. Caller feels that he can not relate sexually to girls and that something is wrong. | 3 |
| 40. | Affective state | Caller can not sleep and is afraid but does not know why. Caller is divorced and now feels bored with life and friends. | 4 |

APPENDIX K--continued

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| 41. | Relationship | Woman is confused and upset. She is accusing her husband of having mental problems. He says she is having an affair with other men. She feels that he is trying to kill her. | 3 |
| 42. | Relationship and affective state | Caller is in love with his girlfriend but it is unrequited love. He is upset. | 3 |
| 43. | Affective state | Caller has only one even close friend. They are very lonely and feel bad. Feels they are all by themselves. | 3 |
| 44. | Affective state | Caller hides in the house and has no friends. Is depressed and just gains weight. Wants to straighten out. | 3 |
| 45. | Affective state and relationship | Intense crying. Caller is very depressed and feels that their whole life is nothing. They feel like a "blank" and desperately want help. | 5 |
| 46. | Affective state | Caller feels old and is having problems with her husband. She cries a lot and feels very confused. She just works, has no fun, and wants help. She wants to commit herself to the state hospital. | 4 |
| 47. | Relationship | Caller's wife wants a divorce. He is mad at spouse and wants to resolve it. | 2 |
| 48. | Affective state | A young girl with physical symptoms is worried over having breast cancer. She feels that she can not talk to her mother and is upset. | 3 |

APPENDIX K--continued

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| 49. | Affective state | Caller is depressed. Lots of little things have added up. They are separated from spouse. Person feels that they have psychiatric problems of some dimension. | 4 |
| 50. | Affective state and relationship | Caller is a psychiatric patient. Can not seem to get up everyday, is depressed and does not get along well with anyone. Has just broken up with his girlfriend. Feels he can not communicate to people, feels unhappy and feels unalive. | 3 |
| 51. | Affective state | Caller is anxious and depressed. Does not know why they have these feelings but does not want to live. But also does not want to die either. | 3 |
| 52. | Affective state | Caller feels bad and wants someone to talk with. Everything has piled up, the person has debts and is divorced. The caller can not sleep at night. | 3 |
| 53. | Affective state | Caller is not sure of their sanity. They are worried that they might do something violent to someone. | 3 |
| 54. | Affective state | Caller is a psychiatric patient who feels that something is coming over him. He feels like going out and hurting someone and is upset that he can not control his feelings. | 4 |

APPENDIX K--continued

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| 55. | Relationship | Caller got in a fight with her boyfriend and is now lonely. Her brother fights with her and her parents leave her alone too much. She feels that no one loves her. | 2 |
| 56. | Affective state and relationship | Caller is worried and anxious. She has menstrual cramps. Caller has just had an abortion. She dislikes everyone and is bitter. Feels that she has had problems for years. | 3 |
| 57. | Relationship | Caller has marital problems. They are fighting. She is pregnant and has problems sleeping too much. Her husband analyzes and rationalizes their problems away. | 3 |
| 58. | Affective state | Caller takes hallucinogenic drugs. Is concerned with his feelings and life problems. | 2 |
| 59. | Relationship | Caller is crying. She is worried that she will be left alone. Her husband has a girlfriend and will not give her a divorce. He lies to wife about his activities. | 3 |
| 60. | Affective state | Caller is feeling bad and is depressed. But they do not want to discuss it. | 2 |
| 61. | Relationship | Caller has a boyfriend. She went out with others to spite him. Caller is worried that he might physically abuse her. Explored the relationship. | 3 |

APPENDIX K--continued

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| 62. | Relationship and affective state | Caller's boyfriend deserted her. She wants to kill herself but is pregnant and she would kill the baby. Is worried that her step-mother will get angry at her. | 4 |
| 63. | Relationship | Caller is very tense at home. Wants to run away. Feels he hates his parents. | 2 |
| 64. | Affective state | Caller feels inadequate. Has been having problems at home from "spells". Feels like he is going to pass out. Has anxiety attacks. | 2 |
| 65. | Relationship | Caller has no friends. Caller does not like family. | 2 |
| 66. | Relationship and affective state | Caller has a problem with her boyfriend. He makes her mad. Her parents do not like her friends. | 2 |
| 67. | Relationship and affective state | Caller has "pressure in head" feeling. Caller is having problems with his parents. | 2 |
| 68. | Affective state | Caller is extremely depressed. Caller is angry. Caller feels that people aggravate him. | 4 |
| 69. | Affective state and relationship | Caller is lonely and has no friends. Feels her husband will not cooperate with her. He makes her angry. | 2 |

APPENDIX K--continued

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| 70. | Relationship | Caller feels like killing self. The family is fighting and the mother and the grandmother restrict the activities of the caller. Caller gets confused by this problem. | 3 |
| 71. | Relationship and affective state | Caller is crying. His wife will not let him see his children. She left him several months ago. He feels he has nothing. He is very angry now and feels the situation is hopeless. | 3 |
| 72. | Relationship | Caller lives alone. Feels has many problems. Caller is divorced and lonely. Is thinking of suicide as a solution. | 3 |
| 73. | Affective state | Is emotionally upset. Caller feels like they are going off the deep end. They have been jilted and want to intellectualize about the problem. The caller does not want to be committed to an institution. | 2 |
| 74. | Relationship | Caller is dropping out of school because is in the process of institutionalizing her mother. She feels upset with her weighty decision to do it and she herself feels like killing herself because of the guilt associated with the decision. | 3 |
| 75. | Relationship | Caller is very anxious. Caller is upset about her son's activities. She feels that her son is rejecting her. | 4 |

APPENDIX K--continued

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| 76. | Affective state | Caller feels that nothing is going well. They are not doing well in school and are losing weight. Caller is experiencing labile affect and it worries them. | 3 |
| 77. | Relationship and affective state | Caller feels that he is all alone. He feels inadequate with girls. Caller is worrying about being an homosexual. | 3 |
| 78. | Affective state | Caller is dropping out of school. They feel as if they have "no identity." Caller feels he can not meet the expectations of his parents. | 2 |
| 79. | Affective state | Caller is having problems with her boyfriend. Is worried that she is pregnant and that boyfriend will not marry her. | 3 |
| 80. | Affective state | Caller is very worried that she is pregnant. | 3 |
| 81. | Relationship | Another person with whom she works is calling the caller a "lesbian". The caller is very worried about what people will think of her at work. She does not feel that she can cope with the problem. | 4 |
| 82. | Relationship and affective state | Caller is having problems with her boyfriend. She is drinking heavily during the week. She now feels that she is having a nervous breakdown. Feels that her "mind is all cluttered." | 3 |

APPENDIX K--continued

- | | | | |
|-----|----------------------------------|--|---|
| 83. | Affective state | Caller is very depressed and lonely. Has just cried. They just got out of a psychiatric ward and do not feel that they can cope with the world. | 4 |
| 84. | Relationship | Caller is crying. His parents have just separated and the caller is conflicted over having to decide which parent to go with if the divorce happens. | 2 |
| 85. | Relationship | Caller broke up with his girlfriend. His parents are forcing him to make decisions that he does not want to make. He is irritated. | 2 |
| 86. | Affective state and relationship | Caller wants help with a heavy drinking problem. Caller is losing the friendship of her married boyfriend. | 2 |
| 87. | Relationship | Caller has homosexual feelings. He lost his boyfriend and is very upset about it. Feels it is hopeless and does not know what to do about it. | 4 |
| 88. | Relationship | Caller is having problems with her boyfriend. She is pregnant. Her mother dominates her. | 3 |
| 89. | Affective state | Caller is depressed. He is angry and threatening to blow up a building. | 3 |

APPENDIX K--continued

- | | | | |
|-----|-----------------|--|---|
| 90. | Affective state | Caller is an alcoholic. He wants help. Caller feels that his whole life has been wasted. | 2 |
| 91. | Affective state | Caller is a student that is about to be drafted. He is anxious and upset about it. | 3 |
| 92. | Affective state | Caller is very depressed. Wants to know one good reason to live. | 4 |

APPENDIX L

Raw Data

Variable

Tape Segment Number	E1	E2	W1	W2	G1	G2	T1	T2	L	TE1	TE2	A1	A2	AC	D1	D2	DC	SE
1	12	092	21	149	24	166	2.13	15.11	14	---	---	2.00	2.00	1.00	5.00	3.67	2.33	4.67
2	23	167	30	222	32	249	3.15	23.67	14	---	---	4.33	2.00	3.33	3.33	1.33	2.00	4.33
3	23	160	32	230	25	173	2.97	20.38	06	---	.30	2.00	2.00	1.00	5.00	3.67	2.33	4.67
4	20	158	22	149	24	183	2.46	18.16	08	---	---	3.00	2.00	2.00	3.33	2.00	2.33	3.00
5	26	190	32	202	31	260	3.32	24.17	31	---	.47	4.33	2.00	3.33	3.33	2.00	2.33	4.33
6	08	030	13	073	13	124	1.27	08.45	39	---	.46	3.00	4.00	0.00	5.00	4.00	2.00	3.00
7	26	172	26	197	34	255	3.18	23.12	32	---	.44	3.67	3.67	1.00	3.00	1.67	2.33	3.00
8	19	154	19	149	33	255	2.66	20.68	10	---	---	1.33	2.33	0.00	2.00	2.33	0.67	2.33
9	28	209	36	285	31	236	3.55	27.07	43	---	.51	4.33	2.00	3.33	4.00	2.00	3.00	4.33
10	11	087	15	149	19	166	1.69	14.93	24	.85	.33	3.67	3.00	1.67	2.67	2.00	1.67	2.67

APPENDIX L---continued

Tape Segment Number	E1	E2	W1	W2	G1	G2	T1	T2	L	TE1	TE2	A1	A2	AC	D1	D2	DC	SE
11	22	168	30	222	28	238	2.99	23.31	56	---	---	4.00	2.00	3.00	4.33	3.00	2.33	2.00
12	21	158	28	184	24	198	2.72	20.03	15	---	.11	3.00	2.33	1.67	5.00	3.00	3.00	3.33
13	34	242	33	230	36	267	3.83	27.39	55	---	.51	5.00	1.67	4.33	5.00	2.00	4.00	5.00
14	19	153	24	129	23	161	2.48	16.42	25	.99	.88	3.00	3.33	0.67	3.67	3.00	1.67	2.67
15	17	124	32	215	25	168	2.74	18.78	50	.89	.64	4.00	2.33	2.67	2.67	2.00	1.67	2.67
16	26	177	29	217	36	251	3.39	23.91	06	---	.66	3.00	2.67	1.33	2.33	2.00	1.33	2.33
17	24	170	24	136	25	198	2.73	18.69	15	.85	.38	4.00	3.33	1.67	2.67	2.67	1.00	3.67
18	16	113	17	123	17	147	1.87	14.25	10	---	---	2.67	2.00	1.67	4.00	4.00	1.00	3.67
19	17	130	20	098	28	196	2.41	15.75	21	.99	.77	4.67	3.00	2.67	2.00	2.00	1.00	2.67
20	21	152	30	197	24	194	2.78	20.12	16	.66	.83	5.00	4.00	2.00	1.00	1.33	0.67	2.67
21	26	192	32	253	28	208	3.18	24.23	--	.99	.99	4.33	3.33	2.00	4.00	2.00	3.00	2.00
22	34	222	38	298	37	279	4.03	29.63	93	.66	.61	4.33	2.00	3.33	4.00	1.67	3.33	4.00
23	18	138	23	179	24	179	2.43	18.39	78	---	---	1.67	1.67	1.00	2.00	1.67	1.33	1.00

APPENDIX L--continued

Tape Segment Number	E1	E2	W1	W2	G1	G2	T1	T2	L	TE1	TE2	A1	A2	AC	D1	D2	DC	SE
24	17	152	28	215	26	213	2.65	21.48	10	---	---	3.67	2.00	2.67	3.00	1.33	2.67	3.00
25	21	160	28	174	28	211	2.87	20.23	62	.99	.66	1.67	2.67	0.00	3.67	3.67	1.00	2.00
26	22	164	34	242	31	219	3.25	23.21	18	.55	.58	4.33	1.00	4.33	3.00	1.00	3.00	4.00
27	22	160	28	197	26	198	2.84	20.57	31	.66	.66	2.00	2.00	1.00	5.00	3.00	3.00	3.33
28	23	165	23	174	32	253	2.92	21.97	18	.66	.43	3.67	2.67	2.00	2.00	3.00	0.00	3.00
29	19	157	32	222	27	164	2.92	20.14	17	.33	.38	2.67	3.00	0.67	3.00	3.00	1.00	3.33
30	18	137	30	184	23	172	2.66	18.29	95	---	.69	1.67	1.67	1.00	4.33	3.00	2.33	3.67
31	26	177	22	151	25	215	2.70	20.16	12	---	---	3.33	3.00	1.33	2.33	2.33	1.00	2.33
32	26	179	28	197	36	268	3.35	23.88	49	---	.33	3.33	1.00	3.33	3.33	1.00	3.33	4.00
33	21	148	31	222	32	234	3.13	22.42	46	.89	.94	3.00	3.33	0.67	3.00	2.00	2.00	2.00
34	20	153	29	207	30	215	2.94	21.34	86	---	---	2.67	1.67	2.00	4.00	2.00	3.00	2.33
35	20	145	24	159	18	137	2.31	16.34	--	---	---	4.67	4.67	1.00	3.33	2.00	2.33	4.00
36	20	133	23	121	21	166	2.39	15.60	--	.22	.55	2.00	3.00	0.00	1.67	1.67	1.00	3.33

APPENDIX L--continued

Tape Segment Number	E1	E2	W1	W2	G1	G2	T1	T2	L	TE1	TE2	A1	A2	AC	D1	D2	DC	SE
37	31	220	29	207	33	241	3.46	24.77	--	---	---	4.33	2.00	3.33	4.00	2.00	3.00	4.33
38	22	152	27	179	26	177	2.78	18.86	--	.99	.40	3.67	3.67	1.00	2.67	2.67	1.00	3.33
39	23	149	27	182	25	183	2.80	19.05	18	---	.37	4.00	2.00	3.00	3.33	2.33	2.00	4.00
40	23	155	29	237	24	184	2.84	21.38	14	---	.49	4.00	2.67	2.33	3.00	1.67	2.33	3.00
41	27	192	32	225	33	256	3.43	24.94	27	---	---	4.00	2.00	3.00	2.00	2.33	0.67	4.00
42	19	124	25	197	30	236	2.75	20.83	99	---	---	2.67	2.00	1.67	2.00	2.00	1.00	1.67
43	27	179	31	225	31	242	3.30	23.96	49	---	.50	2.33	2.00	1.33	4.33	3.00	2.33	2.33
44	24	159	32	240	35	253	3.40	24.18	41	---	.18	1.00	2.00	0.00	4.33	2.00	3.33	3.00
45	36	245	37	278	41	294	4.22	30.28	58	---	---	1.00	1.00	1.00	5.00	2.67	3.33	4.33
46	26	189	33	247	35	272	3.50	26.28	--	.66	.55	4.00	3.00	2.00	3.00	4.00	0.00	4.00
47	28	202	30	247	28	232	3.21	25.25	08	.22	.26	2.00	1.67	1.33	2.00	3.00	0.00	2.00
48	27	182	30	230	30	251	3.25	24.56	14	.99	.99	4.00	2.67	2.33	2.67	1.67	2.00	4.00
49	10	059	16	083	13	070	1.46	07.89	--	.99	.74	2.33	3.33	0.00	3.00	4.00	0.00	2.00

APPENDIX L--continued

Tape Segment Number	E1	E2	W1	W2	G1	G2	T1	T2	L	TE1	TE2	A1	A2	AC	D1	D2	DC	SE
50	22	161	26	194	20	156	2.52	18.95	--	---	---	1.67	2.00	0.67	4.00	3.33	1.67	2.67
51	16	124	21	151	23	183	2.22	16.99	--	.89	.46	3.00	2.00	2.00	2.33	2.33	1.00	3.33
52	23	174	31	217	32	237	3.19	23.29	--	---	---	2.00	1.67	1.33	2.67	1.67	2.00	2.67
53	26	167	34	263	29	251	3.29	25.22	--	.55	.52	3.00	2.33	1.67	4.00	2.67	2.33	2.67
54	25	182	29	202	27	225	3.01	22.58	08	---	---	2.67	2.33	1.33	3.00	1.67	2.33	3.00
55	19	135	21	151	29	237	2.59	19.41	19	---	---	2.33	2.00	1.33	2.67	3.00	0.67	2.67
56	23	165	31	230	27	218	3.03	22.72	22	---	.66	4.33	2.00	3.33	3.00	1.67	2.33	4.33
57	24	175	28	220	29	214	3.01	22.57	43	---	.33	4.00	4.00	0.00	2.00	1.67	1.33	2.67
58	30	199	22	184	38	286	3.35	24.81	06	---	.55	3.33	1.67	2.67	2.00	2.00	1.00	3.00
59	32	208	31	240	34	261	3.59	26.30	47	.99	.62	3.00	4.00	0.00	3.00	4.00	0.00	3.33
60	11	067	29	227	24	169	2.37	17.19	08	---	---	2.67	2.67	1.00	3.00	3.33	0.67	2.00
61	21	167	25	189	26	218	2.67	21.30	14	---	---	3.00	1.67	2.33	3.00	2.00	2.00	3.00
62	27	196	32	247	31	230	3.34	24.98	06	.44	.50	2.67	1.67	2.00	3.00	1.67	2.33	3.00

APPENDIX L--continued

Tape Segment Number	E1	E2	W1	W2	G1	G2	T1	T2	L	TE1	TE2	A1	A2	AC	D1	D2	DC	SE
63	20	138	29	225	26	213	2.79	21.34	08	---	.63	2.00	2.33	0.67	2.00	2.00	1.00	1.67
64	18	123	24	184	24	195	2.47	18.63	--	---	.39	2.00	2.00	1.00	2.33	2.33	1.00	2.00
65	21	152	34	253	37	276	3.41	25.25	22	---	.83	3.00	4.00	0.00	3.33	3.33	1.00	2.00
66	29	213	40	283	38	289	3.97	29.08	32	---	.56	3.33	1.67	2.67	3.00	2.00	2.00	3.33
67	21	156	28	204	32	240	3.02	22.26	23	---	---	2.67	2.00	1.67	2.33	2.00	1.33	2.67
68	21	125	26	199	27	202	2.76	19.52	56	.33	.40	2.00	1.33	1.67	5.00	4.00	2.00	2.00
69	16	099	29	220	30	248	2.78	21.01	55	---	---	3.00	1.00	3.00	3.33	2.00	2.33	3.33
70	22	135	20	123	27	214	2.58	17.53	19	.50	.26	3.33	2.00	2.33	3.00	2.00	2.00	4.00
71	22	154	20	146	23	188	2.43	18.12	43	---	---	3.00	3.33	0.67	3.00	4.00	0.00	2.67
72	27	166	26	212	31	242	3.11	23.01	15	---	---	1.00	1.33	0.67	3.00	2.33	1.67	3.00
73	19	128	22	156	25	191	2.48	17.63	--	---	---	3.00	1.67	2.33	1.00	1.00	1.00	2.00
74	26	176	36	285	29	203	3.39	24.64	--	.33	.44	4.00	3.00	2.00	2.33	2.33	1.00	3.00
75	23	155	28	197	28	217	2.95	21.09	11	.71	.71	5.00	4.00	2.00	2.00	2.33	0.67	3.67

APPENDIX L--continued

Tape Segment Number	E1	E2	W1	W2	G1	G2	T1	T2	L	TE1	TE2	A1	A2	AC	D1	D2	DC	SE
76	23	159	30	235	29	230	3.06	23.14	10	---	---	2.67	1.67	2.00	2.33	2.00	1.33	1.67
77	24	175	33	242	34	256	3.40	24.97	65	.57	.33	3.00	1.67	2.33	3.33	2.33	2.00	4.00
78	25	159	29	217	31	233	3.16	22.59	13	---	---	4.33	2.33	3.00	2.33	2.33	1.00	1.67
79	21	149	24	172	28	210	2.72	19.68	07	---	---	2.00	2.33	0.67	2.00	2.00	1.00	2.67
80	26	177	27	187	27	208	2.96	21.22	20	.44	.55	4.00	1.67	3.33	3.00	2.00	2.00	3.00
81	29	189	20	174	34	244	3.11	22.51	98	---	.63	4.33	3.33	2.00	3.33	2.33	2.00	4.33
82	23	155	26	202	25	187	2.77	20.17	17	---	---	3.33	2.00	2.33	3.00	2.00	2.00	3.67
83	27	183	31	209	28	221	3.19	22.74	38	---	.57	2.33	1.33	2.00	5.00	4.00	2.00	4.33
84	23	166	27	194	30	245	2.99	22.46	29	---	.48	2.67	2.33	1.33	1.67	1.67	1.00	2.67
85	19	144	28	184	27	211	2.77	20.01	11	---	.65	2.00	1.33	1.67	4.00	3.33	1.67	2.67
86	25	162	31	247	26	221	3.05	23.37	15	.77	.77	2.33	2.00	1.33	2.33	2.00	1.33	2.00
87	17	115	31	263	26	175	2.74	20.48	26	---	---	4.00	2.33	2.67	2.67	2.00	1.67	4.67
88	22	154	28	215	26	200	2.82	21.10	06	---	.54	3.00	2.00	2.00	3.00	2.33	1.67	4.00

APPENDIX L--continued

Tape Segment Number	E1	E2	W1	W2	G1	G2	T1	T2	L	TE1	TE2	A1	A2	AC	D1	D2	DC	SE
89	21	124	31	217	25	165	2.85	18.78	--	.44	.37	2.00	2.00	1.00	3.33	4.33	0.00	3.33
90	26	175	31	222	26	218	3.09	22.81	16	.66	.67	2.00	2.00	1.00	2.33	1.33	1.00	4.00
91	19	150	26	194	29	229	2.77	21.26	12	---	---	4.00	2.67	2.33	2.00	1.67	1.33	3.00
92	23	155	29	230	31	244	3.10	23.31	13	.33	.66	3.33	2.33	2.00	5.00	4.00	2.00	3.00

*Note--Each AC and each DC raw data score for each tape segment have been corrected by adding +1.00 to each score because of negative change scores in the data.

**Note--Variable symbols equal the following:

E1= Truax Accurate Empathy summed score for nine raters for the subject.

E2= Lister Empathic Understanding summed score for nine raters for the subject.

W1= Truax Warmth summed score for nine raters for the subject.

W2= Lister Facilitative Warmth summed score for nine raters for the subject.

G1= Truax Genuineness summed score for nine raters for the subject.

G2= Lister Facilitative Genuineness summed score for nine raters for the subject.

T1= Truax Total Conditions mean score for each subject.

T2= Lister Total Conditions mean score for each subject.

APPENDIX L--continued

**Note--continued

- TE1= Technical Effectiveness mean rated score of the crisis worker on that specific phone call.
 TE2= Technical Effectiveness mean rated score on a number of calls that the crisis worker has handled in the center.
 A1= Mean rated anxiety level of the caller at the beginning of the time period.
 A2= Mean rated anxiety level of the caller at the end of the time period.
 AC= Mean rated change score of anxiety of the caller (Has been corrected in this data by +1.00).
 D1= Mean rated depression level of the caller at the beginning of the time period.
 D2= Mean rated depression level of the caller at the end of the time period.
 DC= Mean rated change score of depression of the caller (Has been corrected in this data by +1.00).
 SE= Mean rated level of self-exploration on the part of the caller during the tape segment.

***Note--Truax Empathy raw scores have been corrected in this data from a nine-point scale to a five-point scale by multiplying each subject's cumulative rating score by .555. The corrected raw score of each subject was used to derive the Truax Total Conditions Score for each subject. The Truax Total Conditions Score for each subject is thus the summed score of three scores based on five-point scales and divided by three.

****Note--The professional trainee/professional group consisted of tape segment numbers 1, 2, 4, 8, 11, 23, 31, 34, 35, 37, 41, 50, 52, 54, 55, 60, 61, 67, 69, 70, 72, 73, 76, 79, 82, 91, and 92.

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BIOGRAPHICAL SKETCH

David Allen Knickerbocker was born October 24, 1942 in Marshalltown, Iowa. After moving to Flint, Michigan at the age of four years, he grew up in that area. He was graduated from Central High School, Flint, Michigan in 1960. He attended Flint Community Junior College, majoring in Psychology and English. He was awarded an Associate of Arts degree in August, 1965. He attended the Flint Branch of the University of Michigan, majoring in Psychology and minoring in Sociology. He was awarded the Bachelor of Arts degree in February, 1968.

He entered graduate study in the Department of Psychology of the University of Florida in March, 1968. During the summer of 1969, he was employed as a staff psychologist for the Genesee Community Mental Health Services, Flint, Michigan. He was awarded the Master of Arts degree in March, 1971.

Mr. Knickerbocker was appointed a Psychology Trainee Level II by the Veterans Administration for the time period from September, 1971 to September, 1972. He is presently finishing his internship in Clinical Psychology at Children's Memorial Hospital, Chicago, Illinois. Mr. Knickerbocker will be employed as a staff psychologist for the Lee County Community Mental Health Board, Fort Myers, Florida beginning in September, 1972.

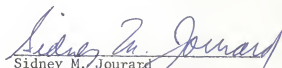
Mr. Knickerbocker is a student member of the Southeastern Psychological Association, a student member of the American Association of Suicidology, and the internship representative to the Chicago Area Association for Training in Clinical Psychology.

David Allen Knickerbocker is married to the former Elizabeth Ann Cahoon of Gainesville, Florida.

I certify that I have read this study and that in my opinion it conforms to acceptable standards of scholarly presentation and is fully adequate, in scope and quality, as a dissertation for the degree of Doctor of Philosophy.


Richard K. McGee, Chairman
Professor of Psychology

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Sidney M. Jourard
Professor of Psychology

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Professor of Psychology

I certify that I have read this study and that in my opinion it conforms to acceptable standards of scholarly presentation and is fully adequate, in scope and quality, as a dissertation for the degree of Doctor of Philosophy.


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This dissertation was submitted to the Department of Psychology in the College of Arts and Sciences and to the Graduate Council, and was accepted as partial fulfillment of the requirements for the degree of Doctor of Philosophy.

August, 1972

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